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Identifying and Assessing Quality Care In Long Term Care Facilities In Montana

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IDENTIFYING AND ASSESSING QUALITY CARE

IN LONG-TERM CARE FACILITIES IN MONTANA

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INTRODUCTION

In October of 1973, Montana State University entered into a research contract with the Medical Assistance Bureau, Department of Social and Rehabilitation Services, State of Montana, to identify and assess quality of care in long-term care facilities in Montana.

The focus of the study was to address the question of the apparent discrepancies between cost of care and quality of care in long-term care facilities in Montana. The system currently employed by the Medical Assistance Bureau to reimburse nursing homes for their services merely perpetuates the status quo. Moreover, it is possible that while the reimbursement system encourages reduced cost it may also encourage reduction in quality. The current system is limited due to lack of information which addresses the quality of services rendered in nursing homes. A prerequisite to developing a quality responsive reimbursement system in Montana is an information base which identifies quality care criteria as they relate to Montana experiences. This study is intended to provide an information base that can be shared and understood by the state nursing home industry officials and the residents of nursing homes as a basis for improving service and care.

BACKGROUND

An advisory committee composed of State personnel and Montana State University faculty representing many disciplines, administrative and clinical representatives from long-term care facilities, and community and consumer advocates was established. This committee was assigned to monitor, advise,

and critique the step-by-step execution of the research plan.[1]

From this advisory group, a task force was formed to draft a proposal to conduct research which would provide information as a basis for developing a weighted quality care index and an implementation plan for quality care. Inherent in the 3-year plan was the ongoing assessment and evaluation of the impact of the plan on the quality of care in Montana and follow-up training and orientation as prescribed by the first year study.

PHILOSOPHY

The philosophical base of the study provides for a holistic approach using a systematic model.[2] The model emphasizes an open-ended environment, recognizes the interaction among physical, health, and social-psychological factors, and the progressive mutuality between and among the diversified functions and parts within a system. The basic premise of the holistic approach is the integration of those influential factors that impact quality care in long-term care facilities. This holistic model accommodates change, dynamics, and fluidity. Applied to the determination of quality care in the long-term care facility, the model recognizes the integrated response of individuals from various groups directly affected by the nursing home arising from the internal environment and the interaction which occurs within the environment. Separate consideration of one or two factors affecting the environment can provide only a partial view of the complex interaction that is taking place in the nursing home industry. The unceasing interaction of individuals with their environments represents an open and fluid approach and a condition of wholeness which ensures an

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[1] See Appendix I. Advisory Committee and Appendix II. Time Activities Schedule.

[2] See Appendix III. Model for Developing Quality Care Systems.

interactive/integrated view of many factors that affect quality care outcomes.

The holistic nature of human responses to environment provides the rationale for five substantive care principles or needs. These five principles have as a postulate the unity and integrity of the individual with his environment. These five needs are:

> The Need of the Conservation of Energy. The ability of the individual to perform the work of life is dependent upon his energy balance--the supply of energy producing nutrients measured against the rate of energy using activities.
>
> The Need of the Conservation of Structural Integrity. The intact organism is the only one that can move with freedom and without restraint in the environment. All encroachments on the continuity of the body structure must be eliminated and the continuity restored if the individual is to survive. The conservation of structural integrity is the necessary defense of anatomical and physiological wholeness.
>
> The Need of the Conservation of Personal Integrity. For every individual, his sense of identity and self-worth is the most compelling evidence of wholeness...Respect from care-givers is essential to the self-respect of the client. This must include a willingness to permit the individual to make decisions for himself when possible and at the very least to be a participant in the decisions that must be made.
>
> The Need of the Conservation of Social Integrity. Individual life has meaning only in the context of social life. No individual can recognize his wholeness unless it is measured against his relationships with other human beings. The strengths that come from human relationships are necessary strengths in times of stress. In a broader sense, the social integrity of individuals is tied to the viability of the entire social system.[1]
>
> The Need of Conservation of Environmental Integrity. The human being and his response to the external environment are inextricably interrelated. The environment represents the reciprocal interaction of multiple factors including the physical elements, i.e., land, building, equipment, etc. Color, sound, safety, and security as they are "seen" and "felt" by the occupants (staff and client) should work in such a manner that they are mutually supportive (other than neutral, or worse, contradictory or competitive) in the quest for human wholeness.

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[1]Myra E. Levine, Introduction to Clinical Nursing. 2nd Edition, Philadelphia, F.D. Davis Company, 1973, p. 18.

This study accepts the holistic approach as the philosophical framework within which decisions about quality care are made. With the lack of quality care standards and the urgent need for improvement of care in nursing homes, the study proposed to identify and quantify in an understandable and usable manner, quality care standards for long-term care facilities in Montana.

PROJECT OBJECTIVES

Quality care in long-term care facilities has significance for a number of groups including, but not limited to, patients, nursing home administrators, legislators, families, and staff.

Because of the complexity and abstract nature of "quality care", many perspectives had to be considered. Thus, it was considered essential to utilize a multidisciplinary team approach, rather than utilizing the traditional medical model. Consequently, the literature related to agency research and long-term care was generated from various disciplines.

In the multi-stage research project, the following project objectives were set forth:

Stage 1: First-Year Objectives (October 1, 1978 - September 31, 1979).

A. Identify the significant characteristics of a quality care system.

B. Develop a clear and simple index of quality care for long-term care facilities in Montana.

C. Quantify the Quality Care Index as it relates to users and providers in Montana.

D. Develop a plan of implementation for utilization of the Quality Care Index.

Stage II: Second-Year Objectives

A. Develop a tool which will assess the facilities' potential for change to enhance the delivery of quality care.

B. Develop a training program for State regulatory and reimbursement personnel for utilization of the Quality Care Index.

C. Develop orientation for Nursing Home Administrators and personnel to the redefinition of quality care in the State.

D. Recommend a modification of reimbursement procedures that relate to quality care.

E. Develop a consultation team approach to assist those facilities that are seriously deficient in delivery of quality care and at the same time lack the where-with-all to initiate the necessary changes.

Stage III: Third-Year Objectives

A. Evaluate the overall effect of the quality care criteria resulting from the research and the new survey method on the quality of care in Montana.

B. Assess the cost/benefit effectiveness of the new criteria.

This report serves as the conclusion of Stage 1 of the proposed 3-year project.

LITERATURE REVIEW

The literature review was conducted by teams of professionals in their specific areas of expertise in which regulations and statements of quality care have been developed. The team was comprised of university faculty and professionals from the community in the areas of architecture, business, communications, medicine, nursing, nursing home administration, nutrition, pharmacology, psychology, and social work.[1]

The professionals were responsible for completing a thorough literature review in each area and for listing impact indicators, based on scientific data, that might be used as criteria for quality care in long-term care facilities.

[1]See Appendix IV. Expert Team Members.

The review of standards, literature, and research related to quality of care was conducted at three levels:

1. Those standards that are operational and are required by State, local, and federal government survey inspection teams, and those quality care statements developed by professionals.

2. Quality care criteria which are in the formative stage, but which are not yet operational (i.e., the Patient Appraisal and Care Evaluation--"PACE"--the Nursing Home Quality Assurance Project, in Wisconsin).

3. The most recent research findings which are preoperational, but which are recognized as significant contributions to quality care standards by the professionals.

Basic reporting forms were developed to lend uniform structure to the conduct of the three levels of literature review.[1] Materials were obtained from sources throughout the United States. Individual summary reports were submitted by discipline.[2] It was essential not to make assumptions or plan parameters on the materials included in the reports. To ensure against personal biases and individual perspectives having an undue influence on the development of the instrument, the "Delphi Process" was used.

THE DELPHI PROCESS

The "Delphi Process" is a method for the systematic solicitation and collation of judgments on a particular topic through a set of carefully designed (sequential) questions or questionnaires, interspersed with summarized information and feed back of opinions derived from previous responses.[3]

In order to conduct the "Delphi Process", at least three separate groups perform three different roles:

The advisory committee (decision makers) assesses the product to make

---

[1] See Appendix V. Basic Reporting Form.

[2] See Appendix VI. Literature Review Summary Reports and Selected Bibliography

[3] Andre L. Delbecy, Andrew H. Van de Vin and David H. Gustofson, Group Techniques for Program Planning, Scotts, Foresman, Glenview, IL, 1975.

sure it meets the purpose ascribed.

The staff researchers design the initial questions or questionnaires, summarize the data, and redesign the follow-up questions.

The expert team (respondent group) members judge the material (in this case, they judge the appropriateness of the literature in the discipline) that relates to the care of aging and to recommend criteria for judging quality care as established by their respective disciplines.

The staff researchers designed two major tasks for the expert team to complete:

1. Review and cite all pertinent literature in the area that is of significance in determining and identifying quality care indicators in the care of the aged.

2. List (based on professional judgment) the most salient indicators in quality care and rank order the list in terms of degrees of importance.

The expert team identified approximately 400 criteria for consideration, based upon the collection of information supplied by the expert team.

CONCEPTUAL MODEL

Consultants were used in formulating a conceptual model which reflects the quality care criteria to be used in assessing long-term care facilities in Montana, in developing a survey instrument based on the framework of the conceptual model, and in devising procedures for administering the surveys and selection of statistical samples that represent the various populations.[1]

The broad statement of focus that guided the development of the research plan was the need to develop a change model and an accompanying mechanism that would improve the quality of care in long-term care facilities. The research should explain why certain standards of care exist, and what kinds of strategies could be employed to effect changes. In developing these

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[1]David Gustafson, Director, Center of Health Systems, Research, and Analysis, University of Wisconsin; and William Leohr, Economist, Graduate School of International Studies, University of Denver, January 12-15, 1979.

strategies, a system should be flexible and accommodating to change.

In establishing the research design which would meet the objectives of the study and define the criteria which would ensure quality care in long-term care facilities, the 400 indicators developed by the expert team were analyzed to avoid duplication. Those indicators that did not adequately reflect the conditions of long-term care in Montana were also studied.

The indicators were summarized and synthesized as the preliminary step in the development of a conceptual model which would consist of criteria usable in the survey research instrument and which could be easily observed while surveying any long-term care facility.

The indicators were classified into a number of major categories.[1] To provide dimension to each of these criteria, a panel of experts assigned five bipolar adjectives to each of the sub-criteria. The bipolar adjectives would serve as the opposing ends of a seven-point Semantic Differential Scale. Ten selected experts and professionals in the field of gerontology were selected. The results were used to draft the survey instrument and the conceptual model.

DEVELOPMENT OF INSTRUMENTS

Nine major criteria and a number of sub-criteria which best describe or reflect the activities and concerns within the major criteria were selected and developed. For each sub-criteria, five Semantic Differential or bipolar adjective terms, quantified along a seven-point scale, were assigned to measure the opinions and attitudes toward each sub-criteria.

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[1] See Appendix VII. Major Criteria and Sub-Criteria for Conceptual Model.

From the bipolar adjective scales submitted by selected experts, the research staff selected those mentioned most frequently and those that tend to give the best indication of measurement for each criteria addressed.[1]

A dependent set of questions was also developed so that the independent factors could be correlated against them in a multiple regression procedure. These dependent questions were seven (later reduced to four questions after viewing the results of the pretest) statements related to quality care performance. A Likert type scale was used to measure the responses of the subjects. These statements were direct questions related to how well the nursing homes were perceived as meeting the needs of the residents.[2]

The dependent variables (or statements) are the variables predicted to, whereas the independent variables are predicted from. In this case, the dependent variables are the presumed effect, which varies concomitantly with changes in the independent variable. For example, if the food (an independent variable) was viewed as bad or non-nutritional, the variance or change in opinion would be reflected in the dependent statements. Therefore, if the quality care indicators are not being met by the facility in the view of the respondent, the response to the dependent statement should also reflect this fact. The multiregression analysis should identify in a step-wise level of importance the independent factor that best explains quality care when regressed against the dependent statements.

SAMPLE SELECTION OF NURSING HOMES

The project was designed to develop a model for assessing quality of care in Montana long-term care facilites.[3] A sample of nursing homes was

[1] See Appendix VIII. Bipolar Adjective Scale.

[2] See Appendix IX. Dependent Statements.

[3] See Appendix X. Long-Term Care Facilites.

required which would minimize travel yet still represent Montana statistically. The population of study was defined by a list of 87 facilities after elimination of four State government operated facilities. The list contained mailing addresses and number of residents as well as information on numbers of professionals and administrators. The population contained 5,324 persons after exclusion of governmental facilities.

Sixteen facilities were eliminated outright because of geographic isolation and extreme travel requirements for interviewer visitation. These 16 facilities contained 687 persons or 13 percent of the person-population.

The remaining 71 facilities were formed into 11 area-based clusters by reference to a Montana highway map.[1] Cluster assignment was based on a subjective determination of highway travel distances between members of a cluster. This criterion was intended to minimize such excessive travel distances if that cluster were drawn into the sample. The clusters varied in size from 235 to 697 persons. Most contained a central larger city plus smaller neighboring towns. Clusters contained between three and eleven facilities.

Six clusters were selected for study from the eleven by a scheme that employed probabilities proportional to size (persons) and non-replacement.

Four facilities were selected from each cluster by re-employment of the "probabilities proportional to size" scheme. As a result, 24 facilities were selected for study with considerable reduction in driving distances for interviewers. The following figure identifies cities where the long-term care facilities were selected. A list of residents was obtained from each of the 24 sample facilities, irrespective of facility size, and an

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[1] See Appendix XI. Area-Based Clusters of Long-Term Care Facilities.

equal sized sample was drawn from each. The overall procedure of drawing facilities with probabilities proportional to size (in persons) and equal probability selection of a constant sized sample within the facility has the effect of giving each of the 4,637 persons in the sampled population approximately equal probability of being interviewed.

Figure 1. Sample of Facilities (n = 24).

# 7	Billings
# 8	Billings
# 9	Billings
#56	Laurel
# 5	Bozeman/Big Timber
#11	Bozeman
#12	Bozeman
#61	Livingston
#37	Great Falls
#38	Great Falls
#39	Great Falls
#40	Great Falls
#52	Hot Springs
#55	Kalispell
#71	Polson
#87	Whitefish
#57	Lewistown
#59	Lewistown
#77	Roundup
#89	White Sulphur Springs
#23	Clancy
#49	Helena
#50	Helena
#51	Helena

Soon after the sample had been established, the Medical Assistance Bureau, Department of Social and Rehabilitation Services, and the Nursing Home Industry entered into a dispute with 25 percent of the nursing homes, threatening to reject Medicaid reimbursement and close, if necessary, to enforce their stand.

The issue had ramifications for the study, but the two major questions relevant to the research were 1) What implication would the negative attitude of nursing home administrators toward SRS have on their receptivity to a research project initiated by SRS?, and 2) How would the potential closing of 25 percent of the nursing homes affect the sampling procedure? The dispute was negotiated and resolved, thus causing only a 6-week delay in survey performance.

The pretest was conducted without incident.

DISCUSSION OF THE PRETEST

Upon completion of the literature review and the identification of the most pertinent quality care criteria, a draft survey instrument was composed. The instrument was used in conducting the pretest. The pretest was initiated to get some idea of the type of procedures that would be needed for the actual test, to get reactions from nursing home personnel and residents that might be helpful for the test, and to locate flaws and/or problems in the instrument so that timely changes could be made.

The pretest was administered to nursing homes not chosen for the test sample. In the pretest, no distinction was made between resident and staff responses, and only fully completed questionnaires were used in the analysis. The pretest efforts yielded 43 fully completed instruments, with at least that many again only partially completed.

At the time of the pretest, the instrument consisted of two questionnaires.

The first questionnaire was a Likert type index (dependent factors) composed of seven items. These items were constructed around the nine defined quality care criteria. The second questionnaire was a seven-point semantic differential scale composed of 53 items. These items were considered "sub-criteria" of the major categories already defined. Each questionnaire was analyzed independently.

Likert Type Index (Dependent Variable)

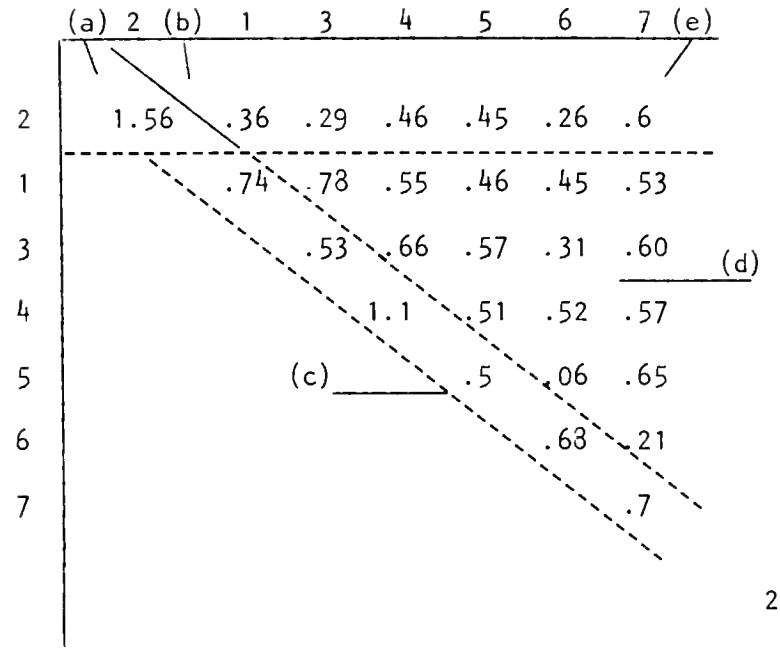
For the Likert type index, the data were examined in several ways. First, a frequency distribution was constructed for each item. Of the seven items, only two had responses among all five possible response categories. The remaining five items had responses in four of the five possible categories. For none of the questions was the response pattern distributed evenly or in a normal pattern over the categories. This indicates that the sample may not represent a normal population distribution and that the respondents were not discriminating over the entire range of response choices. Instead, their responses tend to cluster at the positive end of the scale.

In addition, an item analysis was performed in which each item was correlated with the total score for the index. This item analysis technique, developed by George Bohrnstedt, is a quick method for examining a type of internal validity for indices and scales.[1] In this method, a covariance matrix for the items is constructed. A correlation coefficient is computed for each item based on a combination of elements within the matrix. An example of the matrix and the corresponding formulae is given for Item 2 on the following page.

---

[1] G.W. Bohrnstedt. A quick method for determining reliability and validity of multiple item scales. American Sociological Review. 34, 4, 1979, p. 548.

Item 2:



a = 1.56
b = 0
c = 4.25
d = 7.43
e = 2.42

$$\frac{e}{\sqrt{a + 2b}\quad\sqrt{c + 2d}}$$

$$= \frac{2.42}{(1.249)\ (4.37)}$$

2.1, 3.7 = .443

An accepted range for the correlations is from .3 to .7. The analysis indicated that items 1, 5, and 7 should be dropped from the index. The final index reflects the remaining items. A list of the items and their correlations is attached.[1]

Finally, Cronback's alpha, a reliability estimate, was computed for the index. When first calculated using all seven items, the correlation equaled .62. This is below the accepted lower limit of .7. When calculated a second time using only the items indicated by the item analysis, the correlation was .72, a reliability estimate within accepted limits.

Semantic Differential (Independent Variable)

Discussion with the surveyors and preliminary analyses showed that elderly persons were comfortable completing up to 28 factors in the questionnaire.

[1] See Appendix XII. Item Analysis.

Factor analysis was used as a method of possibly reducing the number of items. Two factor analyses were done. The first involved items related to the more "intangible" criteria of social environment, psychological environment, philosophical environment, physical environment, and patient independence. This consisted of 26 of the 53 items. The analysis indicated eight factors. The items from the first five factors were retained for the final questionnaire. The data indicated that these five factors explain 62 percent of the variance in the data. Addition of the remaining factors offered little additional knowledge and they were therefore dropped.

The second factor analysis involved items related to the more "tangible" criteria of health care, staff, dietary, and administration. This consisted of 27 of the 53 items. This analysis also yielded eight factors, and the items in seven of the factors were retained for use in the questionnaire. The data indicated that these seven factors explain approximately 68.8 percent of the variance.

Combining the results of the two factor analyses produced a questionnaire consisting of 28 items. No further analysis was done on this questionnaire. The Final Survey Instrument consisted of four dependent statements and 28 independent items.[1]

Interpersonal (Network Analysis)

A supplementary study was conducted in conjunction with the main study. The purpose of the research was to determine the levels of satisfaction and well-being related to interpersonal relations with friends and family, and the impact of interpersonal communication on perceived satisfaction with quality care. The results of this supplementary study will be made available separately.

[1] See Appendix XIII. Final Survey Instruments.

ADMINISTRATION OF QUESTIONNAIRES

Training Survey Workers

Ten Montana State University Social Work students were hired to administer the questionnaire in the nursing homes selected in the sample. Based on the staff's experiences with the pretest, it was anticipated that most of the residents asked to complete the questionnaire would need to have the surveyor read the questions to them and also mark their responses. Thus, it was especially important that the surveyors administer the questionnaire in as uniform a manner as possible, to minimize their influence on the outcome. A training session was held, and the surveyors practiced reading and marking the questionnaire in role-playing situations.

Survey Teams

Two staff members were assigned as team leaders, each responsible for 12 of the 24 homes in the sample. Prior to the site visit, the team leader contacted the administrator of each nursing home to explain the project and to request permission to administer the questionnaires to approximately 10 staff members and 6 residents. In several instances, administrators requested and were mailed copies of the questionnaire to review before the survey. Three of the facilities selected in the sample declined to participate (McAuley Nursing Home, Great Falls; Roundup Memorial Nursing Home, Roundup; and Western Manor Nursing Home, Billings).

Survey Procedure

During the site visit, the team leader spoke first with the administrator or with the director of nursing if the administrator was not present. After the administrator or nursing director identified the medicaid patients who were alert enough to understand the questionnaire, the team leader randomly selected eight to ten potential respondents. The surveyors' goal was

six completed resident questionnaires from each facility. Extra names were necessary to allow for those residents who did not want to complete the questionnaire or who were unable to understand it. If the surveyor felt that a resident did not understand the questionnaire, he would try to work through one or two pages of the questionnaire before deciding whether to continue or to end the interview and proceed to another resident. In the smaller facilities, the random sampling of residents was impractical; only a few residents were capable of responding to the questionnaire. The student surveyors administered the questionnaire while the team leader distributed the staff questionnaire. A random sample was again impractical, due to the costs of return postage if questionnaires were left for staff members on other shifts. Questionnaires were distributed to a reasonable cross-section of on-duty staff (kitchen workers, aides, RN's, and so on), and most of these were completed and returned to the team leader during the visit. Stamped return envelopes were left for those staff questionnaires which were not completed during the on-site survey. At most facilities, the team leader also administered resident questionnaires, as each interview took from about 20 minutes to an hour or more, and the surveyors needed assistance to complete six interviews.

Field Survey Schedule

Facility	Location	Date
Bozeman Convalescent Center	Bozeman	7/9/79
Gallatin County Rest Home	Bozeman	
Mountainview Memorial Nursing Home	White Sulphur Springs	7/11/79
Laurel Nursing Home	Laurel	7/13-14/79
St. John's Lutheran Home	Billings	
Yellowstone County Nursing Home	Billings	
Park Place Nursing Home	Great Falls	
Cascade County Convalescent	Great Falls	
Deaconess Skilled Nursing Center	Great Falls	
Valle Vista Manor	Lewistown	7/19-21/79
Central Montana Nursing Home	Lewistown	
Hot Springs Convalescent	Hot Springs	
St. Joseph Convalescent Center	Polson	

Facility (cont'd)	Location (cont'd)	Date (cont'd)
Immanuel Lutheran Home	Kalispell	7/19-21/79
Colonial Manor Nursing Home	Whitefish	
Livingston Convalescent Center	Livingston	7/24/79
Pioneer Nursing Home	Big Timber	
Hillbrook Nursing Home	Clancy	8/10/79
Helena Nursing Home & Health Facilities	Helena	
Parkside Manor	Helena	
Western Care Nursing Home	Helena	

At most facilities, two surveyors administered the resident questionnaires, while the team leader distributed the staff questionnaires and then assisted with the residents. In the larger facilities, it was possible to complete 10 staff and six resident questionnaires, but in the smaller facilities fewer resident questionnaires were completed. In the Laurel Nursing Home, for example, only one was completed, but in most homes four to six resident questionnaires were collected. The nursing home administrators and staff were very cooperative in completing the questionnaires.

Survey of Families

To survey the families of nursing home residents, 80 names were randomly selected from the facilities in the sample. These relatives were mailed a questionnaire and a stamped return envelope. Eighteen completed responses were received and 10 incomplete questionnaires were returned.

ANALYTICAL TECHNIQUE

In order to analyze the data, a multiple regression (stepwise) method was used. The SPSS (Statistical Package for the Social Sciences) multiple regression program was used. It is designed to allow the researcher to assess a wide variety of multiple regression techniques without making the use of the program overly difficult or complicated.

Multiple regression allows the study of the linear relationship between the set of 28 independent variables and the four dependent variables while

taking into account the interrelationships among the independent variables.

The basic concept of multiple regression is to produce a linear combination of independent variables which will correlate as highly as possible with the dependent variable. This study used four dependent factors which asked if the needs of the patients were being met and 28 independent factors identified by the "Conceptual Model" which were verified as indicators of quality care in long-term care facilities. The following results reflect the salience or importance of each factor in a stepwise fashion based on the perception and opinion of each subgroup, i.e., residents, administrators, professionals, paraprofessionals, and families of residents.

RESULTS

The findings are reported for all five subgroups and all subjects combined.

When all subjects (n = 244) were combined and the independent variables were arranged in a stepwise regression (with the first step being the most important, i.e., accounting for the greatest amount of variance, and the second step accounting for the second greatest amount of variance, and so on) against the dependent factor (are the needs of residents being met), the results show that all subjects combined see "safety" (R^2 = .34, f = 38.63, $p > .001$) as the most important indicator of quality care. "Safety" was operationally defined as: "In this nursing home, safety for the residents is adequate, clear, recognized, controlled and procedured." The second most salient independent variable was "food appeal." The following table shows those variables that are most important to all subjects as indicators of "quality care."

Table 1. All Subjects/All Groups Combined (n = 244).

	Variable[1]	R^2	F-Value	Significance Level
Step 1	Safety	.34	38.63	.001
Step 2	Food Appeal	.40	12.91	.001
Step 3	Individual Choice	.44	6.42	.02
Step 4	Personal Identity of Resident	.45	4.68	.05
Step 5	Administrator's Attitude	.46	4.73	.05
Step 6	Community Participation	.47	4.16	.05

The stepwise regression illustrates that 47 percent of the variance was explained by six variables; those variables appearing after the sixth step added no significant change in the variance. The F-Value provides the level of significance from which we can predict the value of the dependent variable given the independent variables X_1, $X_2 \ldots X_n$.

The residents as a group identified and expressed the quality care priorities in the following table.

Table 2. Resident (n = 99).

	Variable	R^2	F-Value	Significance Level
Step 1	Personal Identity of the Resident	.28	6.56	.01
Step 2	Food Appeal	.37	20.53	.001
Step 3	Staff Attitude	.43	9.48	.01
Step 4	Food Preparation/Service	.46	7.52	.01
Step 5	Safety	.49	7.82	.01
Step 6	Preventative Health	.51	4.41	.05

Thus, fifty-one percent (.51) of the variance between meeting resident needs and quality care is explained by the six variables representing the residents' perspective.

The administrators saw a different set of variables as salient in

[1] See Appendix XIII. Final Survey Instruments for further description of variables.

explaining quality care. Table 3 displays the administrators' perceptions of quality care.

Table 3. Administrators (n = 9).

	Variables	R^2	F-Value	Significance Level
Step 1	Self-Worth	.74	28.47	.001
Step 2	Lighting	.88	16.16	.001
Step 3	Environmental Stress	.93	9.11	.01
Step 4	Family/Resident Input to Health Care	.96	4.45	.05

The four significant variables represented by the administrators' perspective account for 96 percent of the variance (.96). From the administrators' point of view, 96 percent of quality care can be explained by the four variables listed above.

The following three tables represent the perception of quality care and quality care indicators by the professional group, the paraprofessionals, and the families of the residents.

Table 4. Professionals (n = 44).

	Variables	R^2	F-Value	Significance Level
Step 1	Self-Worth	.42	9.61	.01
Step 2	Community Participation	.53	4.55	.05
Step 3	Food Appeal	.60	7.47	.01
Step 4	Safety	.64	4.94	.05
Step 5	Resident Restraints	.69	4.93	.05

Table 5. Paraprofessionals (n = 74).

	Variables	R^2	F-Value	Significance Level
Step 1	Safety	.44	5.54	.05
Step 2	Administrators' Attitudes	.52	9.61	.01
Step 3	Staff Attitude	.57	7.72	.01

Table 6. Families of Residents (n = 18).

	Variables	R^2	F-Value	Significance Level
Step 1	Resident Treatment Plan	.86	40.55	.001
Step 2	Preventive Health Plan	.88	6.55	.01
Step 3	Recreational Activities	.91	11.89	.001
Step 4	Therapeutic Program	.94	5.95	.05

DISCUSSION AND IMPLICATIONS

A number of implications can be drawn from these findings. The most significant and most obvious is that no one group (i.e., residents, administrators, professionals, paraprofessionals, or families) agree upon a set indicator that defines quality care. Each group has a different perspective on the question of quality care. This means that "quality care" cannot be easily defined nor operationalized to suit all those directly affected by long-term care. The definition or perception of quality care seems to vary with group values. For example, the "families of resident" seem to value the health-related factors (i.e., resident treatment plan, and so on) much more heavily than any other group. It is suggested that those quality care indicators (variables) perceived as salient by the families reflect the reasons why family members had been placed in a nursing home. They seem to be factors that the family cannot provide the member in their own homes.

Maslow felt that the basic needs for all men are essentially the same. They are part of the nature of man and are of a psychological as well as physiological order. In his writings, Maslow listed in order of importance five general categories of needs: physiological, safety, belongingness, esteem, and self-actualization.[1]

[1] A.H. Maslow, Motivation and Personality, Harper & Row, New York, 1954.

The rank order and degree of importance of these dynamic needs might vary with individuals and situation, but basically they operate for everyone.

In examining the rank order of quality care indicators for all groups combined, a definite order of basic needs is identified: 1) safety (the security need), 2) food (the physiological need), and 3) individual choice and personal identity (the psychological or esteem needs). Maslow's theory seems to fit our model of quality care. This does not imply that the basic needs of the nursing home residents in Montana are not being met. Rather, if improvement and change are to take place, one might consider and concentrate on these three basic needs areas.

The collective responses of the separate sample groups demonstrate some interest preferences. Safety seems to be a high priority among paraprofessionals (step 1), residents (step 4), and professionals (step 4). This might account for its first priority ranking amongst "all groups--all subjects."

"Food Appeal" (step 2 for all groups and all subjects) ranked high in the regression process with the residents (step 2) and the professionals (step 3). Also, "food preparation and service" was important (step 4) to the residents. This implies that the "food" dimension of quality care has to be heavily weighted when giving consideration to the residents' perspective.

"Individual choice," "personal identity of the residents," and "self-worth" (as a social-psychological grouping of indicators) explain a significant amount of the variance for residents, administrators, and professionals. This lends overwhelming support to the proposition that social-psychological factors are as important as physical and health-related factors when assessing

and defining quality care in the context of long-term care. Historically, the social-psychological dimension of long-term care has received less than equal or adequate attention. These findings suggest that more time and resources should be spent on upgrading and attending to these basic needs.

Items such as "administrators' attitude" and "staff attitude" are highly salient among residents and paraprofessionals. This seems to support the importance of the social-psychological dimension of quality care. That is, for residents to have "individual choice," "self-worth," and "personal identity," the attitudes of the administrator and staff must be in accord with a positive socio-psychological environment.

RECOMMENDATIONS

These recommendations should be prefaced with the understanding that one of the major objectives of this first-year research project was to develop criteria and guidelines which would serve as the basis for establishing and developing:

1. a training program for State regulatory and reimbursement personnel,
2. an orientation program for Nursing Home Administrators and personnel for the redefinition of quality care,
3. recommendations to modify reimbursement procedures relating to quality care indicators, and
4. a consultation team to assist facilities that are seriously deficient in quality care delivery and at the same time lack the where-with-all to initiate the necessary changes.

Without resources to effectively initiate the second year of the project, this research and its findings have limited utility. This project was originally proposed and funded with the understanding that it would be a 3-year, 3-phase project.

The most general recommendation is that, in any approach to delivery,

quality care in long-term care must be directed by a systematic, holistic program. In particular, long-term care in Montana must go beyond the "medical model." The medical model emphasizes cure through intermittent treatment by medical experts. This is interspersed with rest and recovery and is appropriate for acute medical illness. Few patients in our nursing homes fit this model. Instead, most "patients" are long-term residents for whom the emphasis should be "home" rather than "nursing." In our extensive review of long-term care research and literature, "experts" stress the importance of individuality. We found that residents, professionals, and administrators perceive "personal identity," "self-worth," , and individuality as primary needs. All groups assessed "individual choice" ahead of any of the medical/health criteria. This indicates that more must be done by the nursing home, and the State regulatory body to increase the controllability of the environment in favor of the patient. Research shows that patients who feel they have some control over their environment tend to be more sensitive to health messages, have increased knowledge about health conditions, attempt to improve physical functioning, and, even through their own efforts, be less susceptible to physical and psychological dysfunction.[1]

Other research, when combined with our findings, leads us to strongly recommend that nursing homes, through State and federal support, initiate training programs which will enhance their staff's knowledge in behavioral technology, behavioral contracting, and consultative/participatory decision making. This training should be accompanied by an assessment of the residents' internal-external expectancies. (Internal-External expectancies refers to the degree to which an individual perceives the events that happen to him/her as dependent on his/her own behavior or as a result of luck, chance, fate,

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[1] Bonnie R. Strickland. "Internal-External Expectancies and Health-Related Behavior." Journal of Consulting and Clinical Psychology. 1978, 46, 6, p. 1192.

or powers beyond one's personal control.)[1] This assessment would allow the staff to know how much "individual choice" making each resident could handle. This program requires an environment sufficiently flexible to allow for such contingencies and a staff trained in behavioral change and motivational technology.

To effect major changes in operations, policy, and procedures, Montana nursing homes will require additional support and resources. Institutional change can only come about if adequate resources are available. These resources will have to be in the form of funds, personnel, and facilities.[2]

Another element essential for institutional change is an appropriate organizational environment. Before nursing homes can be responsive to the changing criteria of quality care, organizational development programs must be initiated. Communication becomes an all-important factor in changing the behavior of and performance of nursing home staffs. Those homes which embark on changing from a primary medical model to the emphasized behavioral model must have a complementary communication system and appropriate organizational behavior. It is recommended that any new program in behavior modelling or behavioral technology be preceded by an in-depth analysis of the organization and the development of a systematic, prescribed change strategy. These assessments and prescriptions must be customized and individualized for each nursing home facility. In other words, a contingency approach must be taken in each case.

Accompanying both the behavioral change efforts and the organizational

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[1] Bonnie R. Strickland. "Internal-External Expectancies and Health-Related Behavior". Journal of Consulting and Clinical Psychology. 1978, 46, 6, p. 1193.

[2] These matters, although essential to implementing the recommendations, are outside the scope of the first phase of this year's research.

development programs, a technical assistance consulting team should be established. To enable programs of this magnitude to work, on-going assistance must be made available to the nursing home administrators and staffs. A team of organizational, health, and behavioral experts should be available for assistance and consultation with those programs (facilities) attempting major changes.

Lastly, both the State regulatory personnel and the nursing home staff should continue reforms to improve on "safety" programs and dietary programs. These two factors were the primary concerns perceived by all subjects in the study. Because these areas get adequate attention by federal, State, and local regulatory agencies, major programming is not needed in monitoring and improving these areas. We do recommend, however, that SRS weight these factors heavily in their formula for reimbursement.

Our findings are based on perceived quality care rather than (directly) observed quality care. The research was proposed as a measure of perceptions, attitudes, and opinions of both the consumers and the deliverers. This statement in no way is intended as a disclaimer from the findings, but only re-states the origin of the data.

APPENDICES

Appendix I. Advisory Committee

Advisory Committee

Margaret Barkley, Professor, School of Nursing, MSU

John Bauer, Associate Professor, Department of Sociology, MSU

Gary Blewett, Analyst, Medical Assistance Bureau, Social and Rehabilitative Services, Helena, MT

Kenneth Bryson, Head and Professor, Department of Speech Communication, MSU

Shirley Cudney, Associate Professor, School of Nursing, MSU

James DiBerardinis, Principal Investigator, Center of Gerontology, MSU

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Marie Gambill, Information and Referral Technician, Bozeman, MT

Dianne Gitlin, Consultant, Center of Gerontology, MSU

Ruth Hansen, Senior Citizen, Bozeman, MT

Charles Hash, Associate Professor, School of Business, MSU

Urenia "Wink" Hughes, Senior Citizen, Bozeman, MT

William Ikard, Bureau Chief, Medical Assistance Bureau, Department of Social and Rehabilitative Services, Helena, MT

Mary Ann Johnston, Assistant Professor, School of Nursing , MSU

John Jutila, Vice President of Research, MSU

Douglas Kenrick, Assistant Professor, Department of Psychology, MSU

Jacqueline McKnight, Chief, Facilities Licensing and Certification Bureau, Health and Environmental Sciences, Helena, MT

Rustem Medora, Head and Professor, School of Pharmacy, U of M

Darryl Miken, Director, Speech and Hearing Science, MSU

Franklin Newman, Director, WAMI, MSU

Margaret Nordvedt, Consultant, Nutrition, Bozeman, MT

Gary A. Refsland, Director, Center of Gerontology, MSU

Mark Robinson, Nursing Home Administrator, Stillwater Convalescent Center, Columbus, MT

Kenneth Rutledge, Director of Planning, Montana Hospital Association, Helena, MT

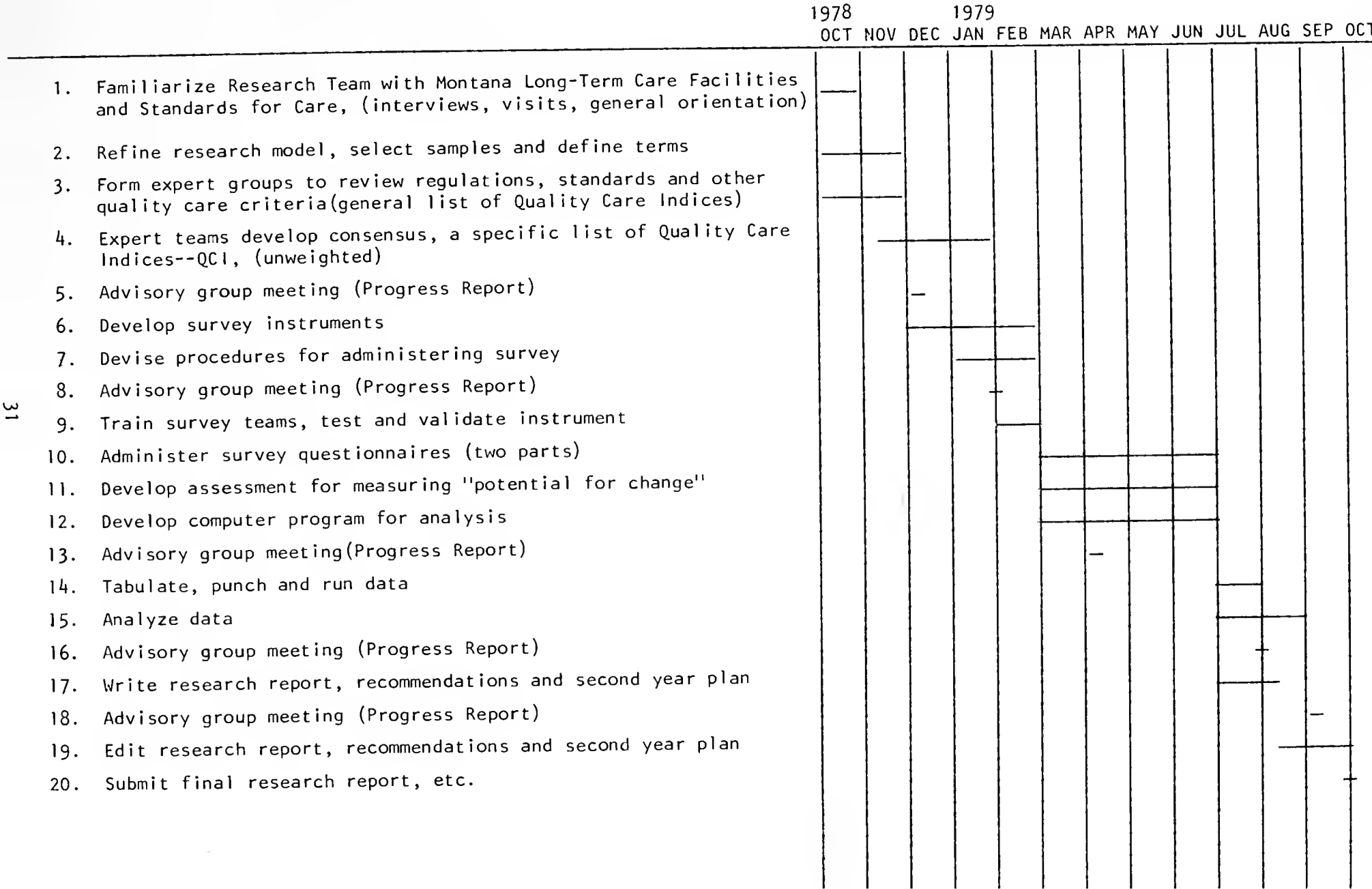
Douglas Schumacher, MD, Bozeman, MT

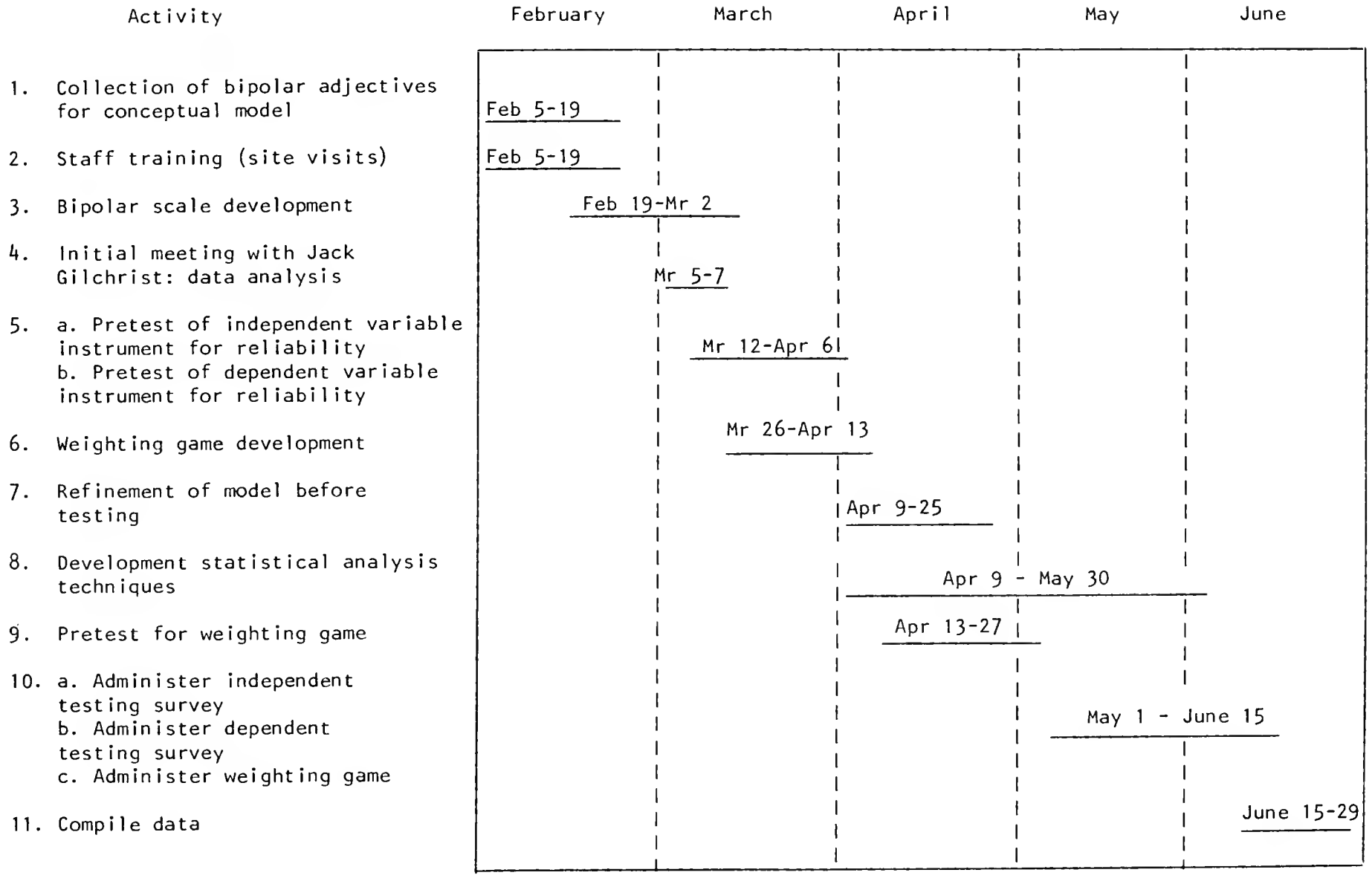
Frank Seitz, Clinical Psychologist, Bozeman, MT

Elmira Smyrl, Professor, Department of Architecture, MSU

Appendix II. Time Activities Schedule

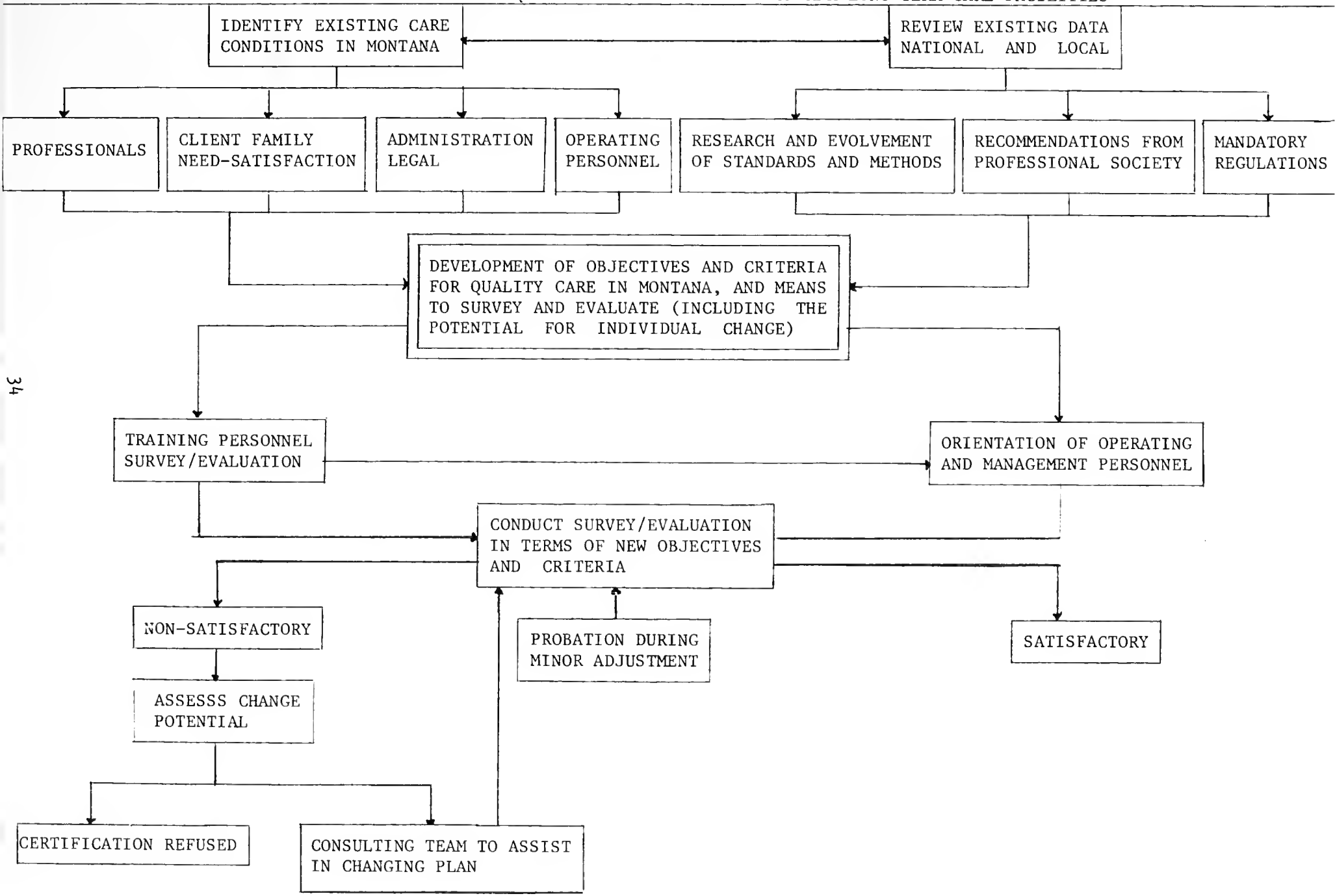
TIME/ACTIVITIES SCHEDULE




Activity
February
March
April
May
June
1. Collection of bipolar adjectives for conceptual model
Feb 5-19
2. Staff training (site visits)
Feb 5-19
3. Bipolar scale development
Feb 19-Mr 2
4. Initial meeting with Jack Gilchrist: data analysis
Mr 5-7
5. a. Pretest of independent variable instrument for reliability
b. Pretest of dependent variable instrument for reliability
Mr 12-Apr 6
6. Weighting game development
Mr 26-Apr 13
7. Refinement of model before testing
Apr 9-25
8. Development statistical analysis techniques
Apr 9 - May 30
9. Pretest for weighting game
Apr 13-27
10. a. Administer independent testing survey
b. Administer dependent testing survey
c. Administer weighting game
May 1 - June 15
11. Compile data
June 15-29

Appendix III. Model for Developing Quality Care Systems

MODEL FOR DEVELOPING QUALITY CARE SYSTEMS IN MONTANA LONG-TERM CARE FACILITIES



Appendix IV. Expert Team Members

Expert Team Members

Margaret Barkley, Professor, School of Nursing, MSU

Ellen Cowles, Research Assistant, Center of Gerontology, MSU

Gail Cochran, Assistant Professor, School of Pharmacy, U of M

Shirley Cudney, Associate Professor, School of Nursing, MSU

James DiBerardinis, Principal Investigator, Center of Gerontology, MSU

George Galinkin, Associate Professor, Department of Sociology, MSU

Dianne Gitlin, Consultant, Center of Gerontology, MSU

Charles Hash, Associate Professor, School of Business, MSU

Mary Ann Johnston, Assistant Professor, School of Nursing, MSU

Douglas Kenrick, Assistant Professor, Department of Psychology, MSU

Margaret Nordvedt, Consultant, Nutrition, Bozeman, MT

Nathaniel Owings, Adjunct Assistant Professor, Speech and Hearing Science, MSU

Kenneth Rutledge, Director of Planning, Montana Hospital Association, Helena, MT

Darryl Sande, Nursing Home Administrator, Hi-Line Home, Havre, MT

Elmira Smyrl, Professor, Department of Architecture, MSU

Jo Anne Tocci, Research Assistant, Center of Gerontology, MSU

Appendix V. Basic Reporting Form

Basic Reporting Form

EXPERT TEAM MEMBER NAME_____

Author
Title
Publisher Date
City Pages

Abstract

Indices
A. Conceptual definitions:

B. Operational definitions:

Method and Procedures

Results and Findings

Comments

Appendix VI. Literature Review Summary Reports and Selected Bibliography

ARCHITECTURE

The following recommendations are made based on the review of literature.

(1) Quality cannot be defined except in terms of the particular needs of the aggregate of patients in the individual facility. The facilities in Montana are mostly small and there is little chance of averaging out needs and services that will be found to some degree in larger units. Even in larger units, there is evidence of cultural factors which would make the means used to achieve the human goals work in one instance and not another, particularly with respect to spatial environment and its effects on communication and conceptual symbolic relations. As we will have to use individual perception, in its broad sense, as part of the instrument for evaluation and be dealing to some degree with the means to achieve a goal at least with choice matrices, evaluations, and trade-offs, alternatives would lose much of their meaning unless judged against their own context.

(2) Indicators in the final matrix should include both goals and avoidance items to get a full picture.

(3) The enforcement officials including evaluators using the instrument we propose, which is an added item in the regulatory system, must have technical competence within the area in which they are working, or the effectiveness of any regulation in terms of the human goals becomes highly questionable, particularly in terms of cost-effectiveness. A new tool, particularly of this type, should not be promulgated without a systematic program of education for the public, the officials, the administrators and care personnel.

(4) The instrument should be designed to give positive credit for a plan of management which positively provides for feedback, is designed to consider, evaluate, and if valuable, have the flexibility to incorporate new understandings, changing patient profile, and changing local community context and values.

COMMUNICATION DISORDERS

In a review of the literature in communicative disorders and related fields, there was no evidence of research having been done specifically to establish quality care standards for nursing homes. This, however, is not surprising. Communicative disorders is a clinical field which requires a specific level of clinical competence (educational and clinical practice) regardless of the setting in which the professional chooses to work. For this reason, there has been an effort within communicative disorders to initially insure that the professional is properly trained. In addition, quality care standards have been developed related to the kind of assessment, and treatment that should be given for each of the different types of speech, language, and hearing disorders. Further, these standards for assessment and treatment of the various disorders are designed to be carried out regardless of the setting in which a client is located. It should be noted that audiologists and speech/language clinicians are generally available to the nursing homes on a referral basis only and are usually not on the regular staff.

Despite the lack of specific quality care standards for nursing homes from the profession of Communicative Disorders, speech/language clinicians and audiologists do follow certain guidelines when working in a nursing home. Generally a nursing home will request the presence of a communicative disorders professional for one of the following reasons: (1) a direct referral from a physician to evaluate and treat an audiological and/or speech/language disorder in a specific client; (2) as a request for a general speech and hearing screening of all nursing home clients as well as for a full evaluation and treatment of clients identified in the screening as needing further help;

and (3) as a consultant to explain such things as hearing loss, the care and use of hearing aids, and the special communication needs of the elderly.

It is important to note that a nursing home may indeed be providing quality care in a variety of areas and not be providing speech and hearing services to the clients. Help in the area of Communicative Disorders is not a necessity for basic survival. However, if a nursing home is really going to attempt to improve a client's quality of life, then some consideration must be given to the speech, language, and hearing problems of those clients. The unfortunate reality of life is that the cost of this care is usually borne by the clients themselves or a third party source (Medicaid/Medicare) and such funds are often unavailable from either of these sources.

At the conceptual level nursing home services are just one of a multiplicity of goods and services demanded by society as it seeks to maximize the sum of human satisfactions enjoyed by members of that society. The best set of nursing home services is thus the set that allows the largest value for the social welfare function.

In view of the multiplicity of variables and constraints, the non-measurability of many of these, and the difficulty of comparing and summing the satisfactions of different persons, the social welfare function is not available as a tool of applied research.

At the practical level, economic activities (that is, those that produce satisfactions for persons at a cost in terms of the use of resources which could be employed elsewhere) are evaluated on the basis of a comparison of the benefits and costs associated with the activities. If there is an excess of the former over the latter the activity is judged to be in the interest of society. Medical-Nursing home benefits are extremely difficult if not impossible to measure in the first instance, and these services are, furthermore, considered to be merit wants (that is, they are utilized regardless of their cost). A preponderance of writers directly or indirectly indicate the provision of the service at minimum cost to be an appropriate economic criterion. This minimization is of course subject to a set of constraints specifying minimum acceptable quality levels in the medical, physical, social, etc. dimensions.

Constrained minimization of cost of nursing home care is consistent with the theory of welfare economics, is understandable and acceptable to clients,

providers, third party payers and public officials. Cost should rank high in any list of indicators as a measure of the effectiveness of facility management.

Cost can certainly be considered as a financial indicator as well as an economic indicator. Cost related reimbursement schemes have resulted in efforts to measure and report costs in all homes licensed to provide care under Medicaid. Efforts have been made to standardize cost accounting or cost finding procedures and to avoid the undue inflation of certain elements of cost.

For proprietary homes, profitability is a valid (some would argue it is the ultimate) indicator, for in order for the firm to survive and provide its service it must generate an acceptable return on the resources (human, physical, and financial) provided by the owners. Conventional financial analysis can be applied to nursing homes to ascertain strengths and weaknesses of a particular home in regard to its profitability.

While one may find reference to other measurers of business economic excellence in nursing homes it may be difficult in practice to ascertain whether or not they are truly applied in spirit. The identification and/or specification of suitable objectives in the nursing home and the translation of these into real guides to everyday operation is one such indicator. If required to do so an administrator could parrot lofty objectives from some trade association manual. Translating these into action is another matter; ascertaining the degree to which such a translation has occurred still another. Considerable additional work may need to be done before this becomes a measurable criterion.

The actual use--as opposed to the presence--of budgets for various departments or activites in the nursing home would probably be an assist in both

cost containment and the control of other aspects of quality of care. Some administrators may have to be trained to develop their skills in budget preparation and the analysis of departures of actual expenditures from budgeted levels. One would expect a better managed home to utilize such budget analysis techniques.

NURSING

The majority of studies and articles deal with the whole person, as opposed to focusing on actions of others, environment, or objective questionnaires, or qualitative studies or statements. The reliability of these qualitative studies has for the most part not been determined. However, the QUALITY OF LIFE cannot be maintained, attained nor preserved or restored if these difficult to measure aspects of the person's life are avoided, simply because they are difficult to measure.

The theme of quality of care and quality of life were predominate in all readings. The individual to be considered in his entirety--including environment and family--was also noted to be of importance. The psycho-social-cultural aspects of the individual's life must be considered in caring for him. The need to maintain independence as long as possible was also discussed frequently. The relationship between the attitudes of the care givers and the nursing care the patient received was found to have a marked influence on both the self esteem of the patient and the nurse. The self esteem and pride of the care giver and the response of the patient to care was found to be directly related. Continuing education for nurses and care givers is a requirement in order to move toward quality of life for the elderly.

Long term care facilities that maximize human dignity and have individualized treatment make the best Long Term Care Facilities (Moss and Halamindaris, 1977). There is a need to meet the needs of long-term clients including providing for a higher quality of life, an acceptable life style pattern, and some power or control over his life (ANA, 1975). Patient

participation in planning his/her own care is an important aspect in providing quality care. Resident participation in governnance of the institution in which he lives is important (First Long Term Care Conference, 1978). Accountability to community and interactions with the community is also important (Moss and Halamindaris).

The majority of patient care in a Long Term Care Facility is provided by unskilled and untrained personnel. These individuals are generally unable to help residents attain their hightest level of physical and mental function and to coordinate all their needs (Schwab, 1975). There is a need to improve staffing with professional registered nurses and to formally train aides so that care can be improved (Schwab, 1975; Schmidt, 1977).

The ANA Congress for Nursing Practice Model for Quality Assurance is a problem-solving process which utilizes process, structure, and outcome criteria as the tools of inquiry. It describes in detail guidelines for developing sets of outcome criteria statements and the process of writing outcome criteria. This process consists of ten sequential steps: (1) choose a category; (2) identify the target population; (3) select the appropriate population variables; (4) select criteria subsets, if desired; (5) generate outcome criteria; (6) establish the critical time; (7) establish the standard; (8) establish any exceptions to the criteria and standards; (9) document the courses for the criteria, and (10) choose preliminary selection of screening criteria. It takes the position that the practicing nurse in the local setting is in the best possible position to identify quality of nursing care and should participate in criteria development.

The Congress for Nursing Practice suggests that "groups developing criteria may find it helpful to organize criteria for patient populations into subsets based on categories of nursing concern. Criteria subsets might

be determined by nursing diagnosis, nursing problems, nursing concerns, functional problems, functional states, nursing theories, and developmental states." (Guidelines for Review of Nursing Care at the Local Level.) In the planning for methods of data gathering, a choice needs to be made whether auditing of charts, patient interviews, staff interviews, observations of patients receiving care, observations of staff giving care, observations of patients' physical and emotional status, or interviews with significant others will be used singly or in some combination. Definition and a number of issues and questions relating to the search for a definition and means of measuring quality of care include: definition of terms, structure, process and outcome, approaches for developing criteria for quality of care, conceptual and organizational frameworks, classification of criteria sets, patient classification, and approaches to data gathering. Decisions in each of these areas must be made as a part of the task of defining and assessing quality of care in extended care facilities in Montana.

NUTRITION

The field of nutrition is dynamic with new information being discovered yearly. For this reason the review of literature primarily concentrated on more current journal articles. Research was not centered on the institutionalized elderly, but frequently when compared to the independent-living elderly the institutionalized fared more poorly with regard to nutritional intakes and status.

Historically the dietary portions of health care surveys have focused on the "administrative" aspects of dietary care. Investigations have centered on menu planning, staffing, sanitation, etc., but have neglected to assess the clinical aspects of the residents' nutritional care. The optimal (within medical constraints) nutritional status of the individual is the best indicator of a successful dietary department.

In most long-term care facilities total nutritional care involves a team approach. Input should come from the physician, nursing staff, social worker, and other auxillary personnel as well as from members of the dietary department. Resident care plans that include short- and long-term nutritional goals are a good indication that nutrition is being considered by the health care team. Established channels of communication, both written and oral, are essential in providing optimum care to the resident.

The first step in providing complete nutritional care is to consider each resident individually in assessing his current nutritional status. A variety of methods are available which vary in complexity and, in most cases, need to be used together for a complete picture. It is necessary to discover any problem areas before corrective action can begin. Surveyors should

be able to recognize and determine that the methods are being used effectively to assess the resident so that the proper nutritional care can be prescribed, prepared, and delivered to the resident.

In assessing the nutritional status of the individual it is necessary to do clinical and physical evaluations, a biochemical work-up, observations of general appearance and behavior, and anthropometric measures. Together with some indication of dietary status (diet history, diet questionnaire, or recorded intakes) these provide an overall picture of nutritional status.

For the resident to ingest adequate amounts of nutrients the food service system must provide foods that supply complete nutrition in a form that is acceptable to the resident. Nutrient content of meals served can be determined by several methods and is usually compared to some standard for evaluation of adequacy. Factors that affect food acceptability include ethnic/religious preferences, the quality of the food product (properly cooked, proper serving temperature, texture, aroma, etc.), the physical environment of the dining area, and the social environment at meal times.

A food service system which delivers high quality, appetizing, and palatable meals served at appropriate temperature, with sufficient variety, and modified for nutritional needs is an effective system.

For the preparation of acceptable meals it is important that the kitchen facility be adequate. Proper areas for both cold and dry storage of food, kitchen layout conducive to effective work flow, and appropriate and functioning equipment are required. Good sanitary practices should be followed in all areas/phases of the dietary department as governed by federal, state, and local codes. There must be an adequate number of employees, properly trained under the direction of a qualified food service supervisor.

PSYCHOLOGY

In attempting to delineate those factors conducive to psychological well-being in residents of long-term care facilities, it was the hope of the researcher to include only those criteria which had been validated in well-controlled and replicated studies. Very few definitive studies in this area were found. Several of the indicators listed do have a reasonable firm empirical base, others are based on minimal evidence, extrapolations from research using other (non-elderly) populations, or some consensus of "experts" in the area (but for which research evidence is not thorough, e.g., often based on correlational studies where cause-effect relationships may be unclear). An attempt is made to indicate which of the criteria fall into each of these categories below, but it should be cautioned that there is a need to validate each before using it as a firm criterion in Montana long-term care facilities, no matter how sensible and obvious the indicator may appear.

A second cautionary note is also in order. There are a number of indicators of psychological functioning which have been used with elderly populations: measures of cognitive functioning (i.e., intelligence, memory, problem solving, etc.), social functioning, emotional well-being (degree of depression, thought disorder, etc.), motivation (e.g., activity levels), perception (e.g., auditory and visual functioning), personality, and satisfaction. To simply give a battery of such tests to the residents of each facility and to make judgments based on any observed differences would of course be absurd. Obviously, each facility does not receive a random cross-section of the elderly population (even within the same category of facilities) and any observed differences might be due to a number of factors

other than the quality of care received (e.g., differences in socioeconomic status or well-being of the residents before admission). A better tactic would be to utilize changes in such indices over time, although, again, different resident populations are likely to show differential patterns of deterioration regardless of environmental factors. What is needed, then, is a different set of criteria applicable to each of a set of categories of residents. Nevertheless, following are listed more "static" criteria which may be potentially measurable on one occasion, although longitudinal measures (including at least two measurement occasions) are considered preferable.

The psychologically relevant indices are divided into two main categories: features of the social environment, and of the physical environment, respectively.

I. Social Environment

1. Predictability/Control. There is a good deal of experimental work with human and animal populations indicating extremely negative effects of loss of control over one's environment. There seems to be a good deal of consensus among experts on aging that the loss of control associated with institutionalization of the elderly also has very negative consequences, and Eisdorfor and Stotsky (1977) suggest that the staff in long-term care facilities often discourages rehabilitation. The dimension of predictability was found by Schulz (1976) to be perhaps as important as control. A number of studies with other populations have found that predictable events are less stressful than unpredictable ones (e.g., Glass and Singer, 1972). Related to the predictability issue is the finding that increased preparation for relocation in a long-term care facility can drastically

reduce consequent mortality. Thus, one clear basis for differential support might be the existence of a well-developed pre-admission orientation program.

2. Type of Behavioral Control Used. Based on the researcher's experience and discussions with a number of staff who work with the elderly, the impression is that the staff in long-term care facilities generally has a poor understanding of behavioral principles, and may often use control techniques which are not only ineffective, but may also produce unnecessary frustration and stress for the resident. There is evidence that stress may in fact hasten the aging process and associated physical diseases.

One simple criterion might be the extent to which key personnel have been trained in behavioral principles, although, of course, the usefulness of such an index remains to be verified.

The type of control used by the administration in dealing with the staff may also have indirect consequences for the patient.

It should also be pointed out that the assessing agency should utilize effective behavioral principles in their handling of the facilities.

Isolation. Several authors have indicated that the relative "permeability" of the institution with the surrounding community is associated with resident well-being, i.e., the extent to which residents are permitted and encouraged to leave the area, and to which outsiders are permitted and encouraged to visit.

Activities. A number of sources suggest that the presence of appropriate and stimulating activities is related to psychological well-being.

II. Physical Environment

1. Personalization. Have the residents been permitted to decorate their own rooms, preferably with artifacts from previous dwellings?

2. Sociofugal vs. Sociopedal Furniture Arrangement. Sommer and Ross (1958) were able to increase social interaction in a geriatric ward by moving the chairs from their usual position around the day room periphery into groups of four around tables.

3. Privacy. A number of studies have indicated social withdrawal and stress under forced high density conditions (Altman, 1975). Ittelson, Proshansky & Rivlin (1970) found that maximum resident interaction occurred in two-person bedrooms.

4. Noise Level. A number of studies done with non-elderly populations suggest that both the absolute level of noise, and its controllability and predictability are related to stress (see Glass and Singer, 1972). This could be measured easily and objectively with tape-recordings and/or a DB meter.

SOCIAL WORK

There is a growing recognition that professional social work is one of the wide spectrum of services needed for dynamic treatment- and service-oriented approaches in long-term care facilities.

The delivery of social services is based on the premise that social work is an essential element in the care of older people in long-term care facilities from the moment such a plan is first considered until discharge from the facility or death. A major role for the social worker revolves around the awareness of social needs and behavior which supports resident social functioning. By training, skill and the basic commitment of the profession, the identification of social needs and implementation of efforts to meet them are clearly in the social work domain.

The social component of care is not a luxury to be avoided or eliminated in the interests of economy. The older person is particularly vulnerable to the attacks on his mental health because he has fewer resources with which to act on his own behalf in obtaining the critically needed social-psychological supplies.

A central theme in work with older people is identification of their strengths or assets, rather than of losses and deficits. Existing and latent strengths constitute the foundation on which constructive treatment programs can be built.

Some of the tasks involved in providing the social component of care are individualization, integration of different aspects of the treatment plan, avoidance of fragmentation, capitalizing on individual strengths, mobilization of resources, help to the individual in adapting to his changed situation

and in utilizing available programs, development of new resources and programs, and modification of the environment.

Direct services to individuals, families and groups; community organization; education; and planning and policy formulation--all are essential ingredients in developing and delivering the required social services, all as components of social work knowledge, values and skills. The literature reviewed covers social work participation from pre-admission through discharge.

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Appendix VII. Major Criteria and Sub-Criteria for Conceptual Model

Major Criteria and Sub-Criteria for Conceptual Model

Recreational Activities

- --variety of activities
- --resident needs

Social/Psychological Environment

- --human dignity
- --social needs
- --environment that accomodates sensory problems
- --noise
- --personal space,(e.g., belongings, etc.)
- --communication
- --environmental stress
- --behavioral change techniques
- --control

Philosophic Environment

- --family
- --staff-patient relations
- --resident influence
- --atmosphere
- --community influence

Physical Environment

- --privacy
- --lighting
- --functional space (e.g., movement, grouping that encourages interaction)
- --safety
- --odor
- --sanitation

Patient Independence

- --individual choice (decision making)
- --patient restraints (e.g., drugs, physical)
- --personal identity
- --sexuality
- --self-management (e.g., fiscal, business, legal)

Administration

- --administration's attitude
- --plan for growth and change
- --financial management
- --staff motivation
- --drug monitoring program

Staff/Staffing

--staff training/in-service
--knowledge of human behavior (e.g., cultural, religious differences)
--competence of staff
--staff attitude
--staff supervision
--staff utilization/staffing patterns

Dietary

--general nutritional plan (e.g., calories, intake)
--special therapeutic diets
--dining arrangements (both dining area and other arrangement patterns)
--nutritional assessments
--food appeal (e.g., attractiveness, religious preference)
--kitchen
--preparation/service

Health Care

--therapeutic programs (rehab motivation, screening programs--speech, hearing, reminiscent therapy, etc.)
--documentation (record keeping)
--family/patient input

Appendix VIII. Bipolar Adjective Scale

Bipolar Adjective Scale

1. Variety of Recreational Activities

a.	no choice	___	___	___	___	___	___	___	choice
b.	useful	___	___	___	___	___	___	___	useless
c.	stressful	___	___	___	___	___	___	___	unstressful
d.	interesting	___	___	___	___	___	___	___	uninteresting
e.	haphazard	___	___	___	___	___	___	___	organized

2. Therapeutic Programs (Rehab Motivation, Screening Programs -- Speech, Hearing, Reminiscent Therapy, Etc.)

a.	thorough	___	___	___	___	___	___	___	minimal
b.	not available	___	___	___	___	___	___	___	available
c.	on-going	___	___	___	___	___	___	___	sporadic
d.	disorganized	___	___	___	___	___	___	___	organized
e.	important	___	___	___	___	___	___	___	unimportant

3. Feeling of Self Worth (Human Dignity)

a.	respect	___	___	___	___	___	___	___	no respect
b.	unimportant	___	___	___	___	___	___	___	important
c.	independency	___	___	___	___	___	___	___	dependency
d.	indifference	___	___	___	___	___	___	___	concern
e.	promote	___	___	___	___	___	___	___	discourage

4. Individual Choice (Decision Making) of Resident

a.	discouraged	___	___	___	___	___	___	___	encouraged
b.	allowed	___	___	___	___	___	___	___	not allowed
c.	unimportant	___	___	___	___	___	___	___	important
d.	choice	___	___	___	___	___	___	___	no choice
e.	acceptable	___	___	___	___	___	___	___	not acceptable

5. General Nutritional Plan (e.g., Calories, Intake)

a.	no plan	___	___	___	___	___	___	___	plan
b.	thorough	___	___	___	___	___	___	___	minimal
c.	irregular	___	___	___	___	___	___	___	regular
d.	meaningful	___	___	___	___	___	___	___	meaningless
e.	unimportant	___	___	___	___	___	___	___	important

6. Facility Attitude Toward Family Participation

a.	uninvolved	___	___	___	___	___	___	___	involved
b.	open	___	___	___	___	___	___	___	indifference
c.	ignored	___	___	___	___	___	___	___	encouraged
d.	included	___	___	___	___	___	___	___	excluded
e.	opposition	___	___	___	___	___	___	___	cooperation

7. Staff Training/In-Service

a.	worthless	___	___	___	___	___	___	___	worthwhile
b.	organized	___	___	___	___	___	___	___	disorganized
c.	sporadic	___	___	___	___	___	___	___	on-going
d.	appropriate	___	___	___	___	___	___	___	inappropriate
e.	unimportant	___	___	___	___	___	___	___	important

8. Resident Privacy

a.	unimportant	____	____	____	____	____	____	____ important
b.	possible	____	____	____	____	____	____	____ impossible
c.	no privacy	____	____	____	____	____	____	____ privacy
d.	practical	____	____	____	____	____	____	____ impractical
e.	inadequate	____	____	____	____	____	____	____ adequate

9. Administration's Attitude

a.	open	____	____	____	____	____	____	____ closed
b.	inflexible	____	____	____	____	____	____	____ flexible
c.	knowledgeable	____	____	____	____	____	____	____ unknowledgeable
d.	negative	____	____	____	____	____	____	____ positive
e.	encouraging	____	____	____	____	____	____	____ discouraging

10. Resident's Recreational Needs

a.	individualized	____	____	____	____	____	____	____ same
b.	involved	____	____	____	____	____	____	____ uninvolved
c.	no choice	____	____	____	____	____	____	____ choice
d.	met	____	____	____	____	____	____	____ unmet
e.	boring	____	____	____	____	____	____	____ fun

11. Documentation (Record Keeping)

a.	delinquent	____	____	____	____	____	____	____ up-to-date
b.	accurate	____	____	____	____	____	____	____ inaccurate
c.	disorganized	____	____	____	____	____	____	____ organized
d.	reviewed	____	____	____	____	____	____	____ ignored
e.	careless	____	____	____	____	____	____	____ careful

12. Environment that Accomodates for Sensory Problems

a.	cheerful	____	____	____	____	____	____	____ depressing
b.	cluttered	____	____	____	____	____	____	____ uncluttered
c.	multi-color	____	____	____	____	____	____	____ monotonous color
d.	monotonous textures	____	____	____	____	____	____	____ multi-textures
e.	poor directional cues	____	____	____	____	____	____	____ good directional cues

13. Special Therapeutic Diets

a.	consistent	____	____	____	____	____	____	____ inconsistent
b.	uncontrolled	____	____	____	____	____	____	____ controlled
c.	available	____	____	____	____	____	____	____ not available
d.	improper	____	____	____	____	____	____	____ proper
e.	important	____	____	____	____	____	____	____ unimportant

14. Staff-Resident Relations

a.	demeaning	____	____	____	____	____	____	____ dignified
b.	us philosophy	____	____	____	____	____	____	____ we/they philosophy
c.	poor	____	____	____	____	____	____	____ excellent
d.	caring	____	____	____	____	____	____	____ noncaring
e.	hostility	____	____	____	____	____	____	____ friendly

15. Staff Knowledge of Human Behavior (Includes Cultural, Religious Differences)

a.	intolerant	____	____	____	____	____	____	____ tolerant
b.	important	____	____	____	____	____	____	____ unimportant
c.	undemonstrated	____	____	____	____	____	____	____ demonstrated
d.	adequate	____	____	____	____	____	____	____ inadequate
e.	useless	____	____	____	____	____	____	____ useful

16. Lighting

a.	inconvenient	____	____	____	____	____	____	____ convenient
b.	sufficient	____	____	____	____	____	____	____ insufficient
c.	inadequate	____	____	____	____	____	____	____ adequate
d.	soft	____	____	____	____	____	____	____ harsh
e.	improper	____	____	____	____	____	____	____ proper

17. Dining Arrangements (Both Dining Area and Other Arrangement Patterns)

a.	unsatisfactory	____	____	____	____	____	____	____ satisfactory
b.	appealing	____	____	____	____	____	____	____ unappealing
c.	unattractive	____	____	____	____	____	____	____ attractive
d.	comfortable	____	____	____	____	____	____	____ uncomfortable
e.	inadequate	____	____	____	____	____	____	____ adequate

18. Family/Resident Input to Health Care

a.	not valued	____	____	____	____	____	____	____ valued
b.	encouraged	____	____	____	____	____	____	____ discouraged
c.	meaningless	____	____	____	____	____	____	____ meaningful
d.	important	____	____	____	____	____	____	____ unimportant
e.	excluded	____	____	____	____	____	____	____ included

19. Resident Restraints (e.g., Drugs, Physical)

a.	clear use	____	____	____	____	____	____	____ obscure use
b.	maximized	____	____	____	____	____	____	____ minimized
c.	low drug use	____	____	____	____	____	____	____ high drug use
d.	unsupervised	____	____	____	____	____	____	____ supervised
e.	necessary	____	____	____	____	____	____	____ unnecessary

20. Administration's Plan for Growth and Change

a.	innovative	____	____	____	____	____	____	____ rigid
b.	restrictive	____	____	____	____	____	____	____ expansive
c.	realistic	____	____	____	____	____	____	____ unrealistic
d.	resistance	____	____	____	____	____	____	____ acceptance
e.	plans	____	____	____	____	____	____	____ no plans

21. Resident Social Needs

a.	unmet	____	____	____	____	____	____	____ met
b.	important	____	____	____	____	____	____	____ unimportant
c.	isolated	____	____	____	____	____	____	____ involved
d.	encouraged	____	____	____	____	____	____	____ discouraged
e.	unhappy	____	____	____	____	____	____	____ happy

22. Competence of Staff

a. responsible ____ ____ ____ ____ ____ ____ ____ irresponsible
b. good ____ ____ ____ ____ ____ ____ ____ poor
c. not dependable ____ ____ ____ ____ ____ ____ ____ dependable
d. qualified ____ ____ ____ ____ ____ ____ ____ under qualified
e. untested ____ ____ ____ ____ ____ ____ ____ tested

23. Noise

a. offensive ____ ____ ____ ____ ____ ____ ____ not offensive
b. soothing ____ ____ ____ ____ ____ ____ ____ distracting
c. meaningless ____ ____ ____ ____ ____ ____ ____ meaningful
d. controlled ____ ____ ____ ____ ____ ____ ____ uncontrolled
e. not predictable ____ ____ ____ ____ ____ ____ ____ predictable

24. Use of Space

a. important ____ ____ ____ ____ ____ ____ ____ unimportant
b. cramped ____ ____ ____ ____ ____ ____ ____ roomy
c. adequate ____ ____ ____ ____ ____ ____ ____ inadequate
d. discouraged ____ ____ ____ ____ ____ ____ ____ encouraged
e. proper ____ ____ ____ ____ ____ ____ ____ improper

25. Staff Input to Health Care

a. encouraged ____ ____ ____ ____ ____ ____ ____ discouraged
b. not valued ____ ____ ____ ____ ____ ____ ____ valued
c. possible ____ ____ ____ ____ ____ ____ ____ not possible
d. ignored ____ ____ ____ ____ ____ ____ ____ considered
e. consistent ____ ____ ____ ____ ____ ____ ____ sporadic

26. Nutritional Assessments

a. not supervised ____ ____ ____ ____ ____ ____ ____ supervised
b. consistent ____ ____ ____ ____ ____ ____ ____ not consistent
c. not available ____ ____ ____ ____ ____ ____ ____ available
d. accurate ____ ____ ____ ____ ____ ____ ____ inaccurate
e. unimportant ____ ____ ____ ____ ____ ____ ____ important

27. Environmental Stress

a. low level ____ ____ ____ ____ ____ ____ ____ high level
b. uncontrolled ____ ____ ____ ____ ____ ____ ____ controlled
c. harmony ____ ____ ____ ____ ____ ____ ____ discord
d. unrelieved ____ ____ ____ ____ ____ ____ ____ relieved
e. comfortable ____ ____ ____ ____ ____ ____ ____ uncomfortable

28. Social Interaction (Communicating)

a. open ____ ____ ____ ____ ____ ____ ____ closed
b. discouraged ____ ____ ____ ____ ____ ____ ____ encouraged
c. effective ____ ____ ____ ____ ____ ____ ____ ineffective
d. bad ____ ____ ____ ____ ____ ____ ____ good
e. involved ____ ____ ____ ____ ____ ____ ____ uninvolved

29. Staff Attitude

a.	indifferent	____	____	____	____	____	____	____ committed
b.	flexible	____	____	____	____	____	____	____ inflexible
c.	negative	____	____	____	____	____	____	____ positive
d.	respectful	____	____	____	____	____	____	____ disrespectful
e.	uncaring	____	____	____	____	____	____	____ caring

30. Resident Participation

a.	demonstrated	____	____	____	____	____	____	____ not demonstrated
b.	useless	____	____	____	____	____	____	____ useful
c.	regarded	____	____	____	____	____	____	____ disregarded
d.	not valued	____	____	____	____	____	____	____ valued
e.	cooperation	____	____	____	____	____	____	____ opposition

31. Administration Financial Management

a.	good	____	____	____	____	____	____	____ bad
b.	no control	____	____	____	____	____	____	____ cost control
c.	adequate	____	____	____	____	____	____	____ inadequate
d.	unorganized	____	____	____	____	____	____	____ organized
e.	suitable	____	____	____	____	____	____	____ unsuitable

32. Safety

a.	inadequate	____	____	____	____	____	____	____ adequate
b.	clear	____	____	____	____	____	____	____ obscure
c.	ignored	____	____	____	____	____	____	____ recognized
d.	controlled	____	____	____	____	____	____	____ uncontrolled
e.	no procedures	____	____	____	____	____	____	____ procedures

33. Personal Identity of Resident

a.	retained	____	____	____	____	____	____	____ lost
b.	not recognized	____	____	____	____	____	____	____ recognized
c.	expressed	____	____	____	____	____	____	____ not expressed
d.	discouraged	____	____	____	____	____	____	____ encouraged
e.	accepted	____	____	____	____	____	____	____ not accepted

34. Atmosphere (General Climate of Home)

a.	relaxed	____	____	____	____	____	____	____ tense
b.	cold	____	____	____	____	____	____	____ warm
c.	cheerful	____	____	____	____	____	____	____ gloomy
d.	closed	____	____	____	____	____	____	____ open
e.	comfortable	____	____	____	____	____	____	____ uncomfortable

35. Preventative Health Care (Keeping Residents Well)

a.	not valued	____	____	____	____	____	____	____ valued
b.	demonstrated	____	____	____	____	____	____	____ not demonstrated
c.	sporadic	____	____	____	____	____	____	____ consistent
d.	important	____	____	____	____	____	____	____ unimportant
e.	not in care plan	____	____	____	____	____	____	____ in care plan

36. Personalized Space

a.	inadequate space	___	___	___	___	___	___	ample space
b.	important	___	___	___	___	___	___	unimportant
c.	allowed	___	___	___	___	___	___	not allowed
d.	sterile setting	___	___	___	___	___	___	warm setting
e.	available	___	___	___	___	___	___	not available

37. Rewarding Techniques

a.	inconsistent	___	___	___	___	___	___	consistent
b.	motivated	___	___	___	___	___	___	not motivated
c.	unplanned	___	___	___	___	___	___	planned
d.	used	___	___	___	___	___	___	not used
e.	discouragement	___	___	___	___	___	___	encouragement

38. Food Appeal (e.g., Attractiveness, Religious Preference)

a.	tasteful	___	___	___	___	___	___	tasteless
b.	unattractive	___	___	___	___	___	___	attractive
c.	variety	___	___	___	___	___	___	repetitive
d.	not planned	___	___	___	___	___	___	planned
e.	colorful	___	___	___	___	___	___	drab

39. Supervision of Staff

a.	consistent	___	___	___	___	___	___	not consistent
b.	inadequate	___	___	___	___	___	___	adequate
c.	meaningful	___	___	___	___	___	___	meaningless
d.	indifferent	___	___	___	___	___	___	caring
e.	competent	___	___	___	___	___	___	incompetent

40. Odor

a.	stale	___	___	___	___	___	___	fresh
b.	concerned	___	___	___	___	___	___	indifferent
c.	uncontrolled	___	___	___	___	___	___	controlled
d.	pleasant	___	___	___	___	___	___	unpleasant
e.	masked odors	___	___	___	___	___	___	no odors

41. Community Participation

a.	important	___	___	___	___	___	___	unimportant
b.	insignificant	___	___	___	___	___	___	significant
c.	encouraged	___	___	___	___	___	___	not encouraged
d.	overlooked	___	___	___	___	___	___	recognized
e.	regarded	___	___	___	___	___	___	disregarded

42. Kitchen

a.	functional	___	___	___	___	___	___	nonfunctional
b.	inadequate	___	___	___	___	___	___	adequate
c.	clean	___	___	___	___	___	___	dirty
d.	disorganized	___	___	___	___	___	___	organized
e.	convenient	___	___	___	___	___	___	inconvenient

43. Sanitation

a.	dirty	____	____	____	____	____	____	____ clean
b.	appropriate	____	____	____	____	____	____	____ inappropriate
c.	no procedures	____	____	____	____	____	____	____ procedures
d.	good	____	____	____	____	____	____	____ poor
e.	unhealthy	____	____	____	____	____	____	____ healthy

44. Medical Coverage

a.	adequate	____	____	____	____	____	____	____ inadequate
b.	not available	____	____	____	____	____	____	____ available
c.	reliable	____	____	____	____	____	____	____ unreliable
d.	minimal	____	____	____	____	____	____	____ thorough
e.	consistent	____	____	____	____	____	____	____ sporadic

45. Facility Attitude Toward Sexuality of Resident

a.	aware	____	____	____	____	____	____	____ unaware
b.	disapproving	____	____	____	____	____	____	____ approving
c.	desirable	____	____	____	____	____	____	____ distasteful
d.	closed	____	____	____	____	____	____	____ open
e.	privacy for sexual activity	____	____	____	____	____	____	____ no privacy for sexual activity

46. Assistive Devices
(e.g., Wheelchairs, Dentures, Hearing Aids, Etc.)

a.	inappropriate	____	____	____	____	____	____	____ appropriate
b.	important	____	____	____	____	____	____	____ not important
c.	not enough	____	____	____	____	____	____	____ enough
d.	adequate	____	____	____	____	____	____	____ inadequate
e.	not available	____	____	____	____	____	____	____ available

47. Administration's Attitude Toward Staff Motivation

a.	indifferent	____	____	____	____	____	____	____ concerned
b.	consistent	____	____	____	____	____	____	____ inconsistent
c.	unimportant	____	____	____	____	____	____	____ important
d.	appropriate	____	____	____	____	____	____	____ inappropriate
e.	no incentive	____	____	____	____	____	____	____ incentive

48. Staff Utilization/Staffing Patterns

a.	realistic	____	____	____	____	____	____	____ unrealistic
b.	disorganized	____	____	____	____	____	____	____ organized
c.	logical	____	____	____	____	____	____	____ illogical
d.	inflexible	____	____	____	____	____	____	____ flexible
e.	appropriate	____	____	____	____	____	____	____ inappropriate

49. Drug Monitoring Program

a.	minimal	____	____	____	____	____	____	____ thorough
b.	skilled	____	____	____	____	____	____	____ unskilled
c.	unimportant	____	____	____	____	____	____	____ important
d.	adequate	____	____	____	____	____	____	____ inadequate
e.	unskilled	____	____	____	____	____	____	____ skilled

50. Resident Self-Management (e.g., Fiscal, Business, Legal)

a.	confidential	___	___	___	___	___	___	___ nonconfidential
b.	discouraged	___	___	___	___	___	___	___ encouraged
c.	allowed	___	___	___	___	___	___	___ not allowed
d.	insignificant	___	___	___	___	___	___	___ significant
e.	acknowledged	___	___	___	___	___	___	___ ignored

51. Food Preparation/Service

a.	efficient	___	___	___	___	___	___	___ inefficient
b.	dirty	___	___	___	___	___	___	___ clean
c.	punctual	___	___	___	___	___	___	___ late
d.	inflexible	___	___	___	___	___	___	___ flexible
e.	consistent	___	___	___	___	___	___	___ inconsistent

52. Resident Treatment Plan

a.	unavailable	___	___	___	___	___	___	___ available
b.	complete	___	___	___	___	___	___	___ incomplete
c.	unrealistic	___	___	___	___	___	___	___ realistic
d.	coordinated	___	___	___	___	___	___	___ not coordinated
e.	ignored	___	___	___	___	___	___	___ followed

53. Professional Health Assessment of Resident

a.	available	___	___	___	___	___	___	___ not available
b.	inaccurate	___	___	___	___	___	___	___ accurate
c.	documented	___	___	___	___	___	___	___ not documented
d.	minimal	___	___	___	___	___	___	___ thorough
e.	unnecessary	___	___	___	___	___	___	___ necessary

Appendix IX. Dependent Statements

Dependent Statements

1. This nursing home generally meets the needs of the residents.

0	1	2	3	4	5
(no opinion)	(poor)	(fair)	(average)	(good)	(excellent)

2. This nursing home is a safe, well-lighted building that is easy for the residents to get around in.

0	1	2	3	4	5
(no opinion)	(poor)	(fair)	(average)	(good)	(excellent)

3. This nursing home does a good job of taking care of residents when they have health problems.

0	1	2	3	4	5
(no opinion)	(poor)	(fair)	(average)	(good)	(excellent)

4. This nursing home gives the resident a feeling of being his own person.

0	1	2	3	4	5
(no opinion)	(poor)	(fair)	(average)	(good)	(excellent)

5. This nursing home home is a friendly, open place where families and people in the town can come to visit and are welcome.

0	1	2	3	4	5
(no opinion)	(poor)	(fair)	(average)	(good)	(excellent)

6. The staff of the nursing home is helpful and concerned about the residents.

0	1	2	3	4	5
(no opinion)	(poor)	(fair)	(average)	(good)	(excellent)

7. This nursing home offers the resident the chance to make friends and do things together.

0	1	2	3	4	5
(no opinion)	(poor)	(fair)	(average)	(good)	(excellent)

Appendix X. Long Term Care Facilities

Long Term Facilities[1]

	FACILITY	CARE LEVEL	NUMBER OF BEDS	PROF	PARA	ADMIN
1.	Community Hospital of Anaconda, N.H. 600 Oak Street Anaconda, MT 59711	SN INT A	40 28	3 3	7 4	1
2.	Fallon Memorial Nursing Home 320 Hospital Dr., Box 820 Baker, MT 59313	SN	32	3	5	1
3.	Bigfork Convalescent Center Box 338 Bigfork, MT 59911	SN	40	3	7	1
4.	Sande Convalescent Home P. O. Box F Big Sandy, MT 59520	INT A	29	3	4	1
5.	Pioneer Nursing Home West 7th Big Timber, MT 59011	SN	48	4	8.5	1
6.	Glendeen Nursing Home 4001 Rosebud Lane Billings, MT 59101	SN	36	3	7	1
7.	St. John's Lutheran Home 3940 Rimrock Road Billings, MT 59102	SN INT A	84 92	7 8	13 14	1
8.	Western Manor Nursing Home 2115 Central Avenue Billings, MT 59102	SN	158	8	14	1
9.	Yellowstone County Nursing Home 1415 Yellowstone River Road Billings, MT 59103	SN INT	15 43	3 4	.5 7	1
10.	Boulder River School & Hospital Box 87 Boulder, MT 59632	INT A	309	8	14	1

[1]PROF--Professional, PARA--Paraprofessional, ADMIN--Administrators, SN--Skilled Nursing, INT A--Intermediate A, INT B--Intermediate B

	FACILITY	CARE LEVEL	NUMBER OF BEDS	PROF	PARA	ADMIN
11.	Bozeman Convalescent Center 321 North 5th Avenue Bozeman, MT 59715	SN INT A	50 53	4 4	8.5 9.5	1
12.	Gallatin County Rest Home 1221 W. Durston Road Bozeman, MT 59715	SN	56	4	10	1
13.	Powder River Nursing Home Box 70 Broadus, MT 59317	SN INT A	19 21	3 3	1.5 3	1
14.	Blackfeet Nursing Home Drawer T Browning, MT 59417	SN INT A	29 20	3 3	4 1.5	1
15.	Butte Park Royal Convalescent Center 3251 Nettle Street Butte, MT 59701	SN INT A	100 100	8 8	15 15	1
16.	Crest Nursing Home, Inc. 3131 Amherst Avenue Butte, MT 59701	SN INT A	40 63	3 4	6 14	1
17.	Silver Bow General Nursing Home 2500 Continental Drive Butte, MT 59701	SN INT A INT B	40 36 24	3 3 3	6 6 3	1
18.	Liberty County Nursing Home Chester, MT 59522	SN INT A	24 16	3 3	3 1.5	1
19.	Sweet Memorial Nursing Home Chinook, MT 59523	SN	34	3	5	1
20.	Teton Nursing Home 24 Main Avenue North Choteau, MT 59422	SN INT A	38 3	3	6	1
21.	Teton Medical Center-Nursing Home 915 4th Street N.W. Choteau, MT 59422	SN INT A	6 18	3 3	0 1.5	1
22.	McCone County Nursing Home Box 198 Circle, MT 59215	SN INT A	26 14	3 3	4 .5	1
23.	Hillbrook Nursing Home Route 2 Clancy, MT 59634	SN INT A	24 43	3 4	3 7	1

	FACILITY	CARE LEVEL	NUMBER OF BEDS	PROF	PARA	ADMIN
24.	Stillwater Convalescent Center 350 West Pike Avenue Columbus, MT 59019	SN INT A	31 50	3 4	5 8.5	1
25.	Pondera Pioneer Nursing Home Conrad, MT 59425	SN INT A	41 22	4 3	7 3	1
26.	Memorial Nursing Home P. O. Box 2398 Cut Bank, MT 59427	SN INT A	23 16	3 3	3 1.5	1
27.	Colonial Manor of Deer Lodge 1100 Texas Avenue Deer Lodge, MT 59722	SN INT A	40 20	3 3	6 1.5	1
28.	Parkview Acres Convalescent Center 200 Oregon Street Dillon, MT 59725	SN INT A	29 79	3 6	4 13	1
29.	Dahl Memorial Nursing Home P. O. Box 46 Ekalaka, MT 59324	SN	21	3	3	1
30.	Mountain View Manor Nursing Home P. O. Box 327 Eureka, MT 59917	SN INT A	30 10	3 3	4 .5	1
31.	Rosebud Community Nursing Home Forsyth, MT 59327	SN INT	39 8	3 3	6 0	1
32.	Chouteau County District Hospital 1512 St. Charles Street P. O. Box 249 Fort Benton, MT 59442	SN	22	3	3	1
33.	Galen State Hospital R.F.D. No. 1 Galen, MT 59722	INT A	107	8	15	1
34.	Frances Mahon Deaconess Hospital 621 Second St. South Glasgow, MT 59230	SN	6	3	0	1
35.	Valley View Home 1225 Perry Lane Glasgow, MT 59230	SN INT A	40 50	3 4	6 8.5	1
36.	Glendive Community Nursing Home Ames and Prospect Glendive, MT 59330	SN INT	30 45	3 4	4 7	1

	FACILITY	CARE LEVEL	NUMBER OF BEDS	PROF	PARA	ADMIN
37.	Cascade County Convalescent Nursing Home 1130 17th Avenue South Great Falls, MT 59405	SN	230	8	15	1
38.	Deaconess Skilled Nursing Center 1109 Sixth Avenue North 1101 26th Street South Great Falls, MT 59405	SN	90	7	14	1
39.	McAuley Nursing Home 1009 Third Avenue North Great Falls, MT 59401	SN	42	4	7	1
40.	Park Place Nursing and Rehabilitation Center 15th Avenue South & 32nd St. Great Falls, MT 59405	SN INT A	100 65	8 4	15 11.5	1
41.	Valley View Estates Nursing Home, Inc. 225 North 8th Street Hamilton, MT 59840	SN INT A	58 40	4 3	10 6	1
42.	Big Horn County Memorial Nursing Home 17 North Miles Hardin, MT 59034	SN	34	3	5	1
43.	Mountain View Rest Haven 520 West Third Street Hardin, MT 59034	INT A	21	3	3	1
44.	Harlem Rest Home Harlem, MT 59526	INT A	67	4	13	1
45.	Wheatland Memorial Nursing Home 530 Third Street Northwest Harlowton, MT 59036	SN	33	3	5	1
46.	Hi-Line Home Star Route 36, Box 1 Havre, MT 59501	INT A	18	3	1.5	1
47.	Lutheran Home of the Good Shepherd 2229 Fifth Avenue Havre, MT 59501	SN INT A	85 17	7 3	13 1.5	1
48.	Cooney Convalescent Home 3404 Cooney Drive Helena, MT 59601	SN INT A	36 24	3 3	6 3	1

	FACILITY	CARE LEVEL	NUMBER OF BEDS	PROF	PARA	ADMIN
49.	Helena Nursing Home and Health Facilities, Inc. 25 South Ewing Helena, MT 59601	SN INT A	32 31	3 3	5 5	1
50.	Parkside Manor 5 Memorial Drive Helena, MT 59601	INT A	52	4	9	1
51.	Western Care Nursing Home 2475 Winne Avenue Helena, MT 59601	SN INT A	12 96	3 8	.5 15	1
52.	Hot Springs Convalescent, Inc. Drawer U Hot Springs, MT 59845	SN INT A	39 33	3 3	6 5	1
53.	Garfield County Hospital Jordan, MT 59337	SN INT	4 8	3 3	0 0	1
54.	Flathead County Nursing Home 1251 Willow Glen Drive Kalispell, MT 59901	SN INT A	49 17	4 3	8.5 1.5	1
55.	Immanuel Lutheran Home Crestline Avenue Kalispell, MT 59901	SN INT A	50 89	4 7	8.5 14	1
56.	Laurel Nursing Home 421 Yellowstone Avenue Laurel, MT 59044	SN	29	3	4	1
57.	Central Montana Nursing Home 408 Wendell Lewistown, MT 59457	SN INT	31 39	3 3	5 6	1
58.	Montana Center for the Aged Box 820 Lewistown, MT 59457	SN INT A	10 189	3 8	.5 15	1
59.	Valle Vista Manor 402 Summit Avenue Lewistown, MT 59457	SN INT A	70 27	4 3	13 4	1
60.	Libby Convalescent Center 308 East Third Libby, MT 59923	SN INT A	40 23	3 3	6 3	1
61.	Livingston Convalescent Center 510 South 14th Street Livingston, MT 59047	SN INT A	65 60	4 4	14 14	1

	FACILITY	CARE LEVEL	NUMBER OF BEDS	PROF	PARA	ADMIN
62.	Malta Nursing Home 117 South 9th W., Drawer CC Malta, MT 59538	INT A	35	3	5	1
63.	Custer County Rest Home Box 130 Miles City, MT 59301	SN INT A INT B	40 78 3	4 6	7 13	1
64.	Friendship Villa 1242 South Strevell Route 1, Box 288 Miles City, MT 59301	SN INT A	40 27	4 3	7 4	1
65.	Community Nursing Home 2823 Fort Missoula Road Missoula, MT 59801	SN	62	4	11.5	1
66.	Hillside Manor 4720 23rd Street Missoula, MT 59801	SN	107	8	14	1
67.	Royal Manor, Inc. 3018 Rattlesnake Drive Missoula, MT 59801	SN INT B	31 20	3 3	5 1.5	1
68.	Wayside 2222 Rattlesnake Road Missoula, MT 59801	SN INT A	40 4	4 3	7	1
69.	Clark Fork Valley Hospital Kruger Rd., P.O. Box 768 Plains, MT 59859	SN	12	3	.5	1
70.	Sheridan Memorial Nursing Home West Laurel Avenue Plentywood, MT 59254	SN	37	4	7	1
71.	St. Joseph Convalescent Center 1st & 14th Avenue P. O. Box 1530 Polson, MT 59860	SN INT A	70 42	4 4	13 7	1
72.	Community Hospital Nursing Home Poplar, MT 59255	SN	21	3	3	1
73.	Carbon County Health Care Center #1 South Oaks P. O. Box 430 Red Lodge, MT 59068	SN INT A	36 44	4 4	7 7	1
74.	Carbon County Memorial Nursing H. P. O. Box 580 Red Lodge, MT 59068	SN	24	3	3	1

	FACILITY	CARE LEVEL	NUMBER OF BEDS	PROF	PARA	ADMIN
75.	Happy Acres Rest Home Star Route, Box 001 Ronan, MT 59864	INT A	10	3	.5	1
76.	West Side Rest Home Main St., Box 787 Ronan, MT 59864	INT A	23	3	1.5	1
77.	Roundup Memorial Nursing Home 1202 Third St. West Roundup, MT 59072	SN	18	3	1.5	1
78.	Daniels Memorial Nursing Home P. O. Box 400 Scobey, MT 59263	SN	34	3	5	1
79.	Toole County Nursing Home 112 First St. South Shelby, MT 59474	SN INT A INT B	21 7 4	3 3 3	1.5	1
80.	Madison County Nursing Home Sheridan, MT 59749	INT A	39	4	7	1
81.	Richland Homes, Inc. Girard Rt., Box 106 Sidney, MT 59270	SN INT A INT B	25 50 10	3 4 3	3 8.5 .5	1
82.	North Valley Nursing Home North Main Stevensville, MT 59870	SN INT A	37 20	4 3	7 1.5	1
83.	Mineral County Hospital Brooklyn and Roosevelt P. O. Box 116 Superior, MT 59872	SN	20	3	1.5	1
84.	Prairie Community Nursing Home Terry, MT 59349	SN	12	3	.5	1
85.	Broadwater County Rest Home Townsend, MT 59644	INT A	18	3	1.5	1
86.	Warm Springs State Hospital Warm Springs, MT 59756	SN INT A	148 228	8 8	14 14	1
87.	Colonial Manor Nursing Home East 7th Street P. O. Box 1359 Whitefish, MT 59937	INT	60	4	14	1

	FACILITY	CARE LEVEL	NUMBER OF BEDS	PROF	PARA	ADMIN
88.	North Valley Hospital and Extended Care Highway 93 South P. O. Box 68 Whitefish, MT 59937	SN	50	4	8.5	1
89.	Mountainview Memorial Nursing Home Box Q White Sulphur Springs, MT 59645	SN INT A	16 15	3 3	1.5 1.5	1
90.	Wibaux County Nursing Home 601 South Wibaux Street P. O. Box 266 Wibaux, MT 59353	SN INT A	30 10	3 3	4 .5	1
91.	Faith Lutheran Home 1000 Sixth Avenue North Wolf Point, MT 59201	INT A INT B	39 21	4 3	7 3	1

Appendix XI. Area-Based Clusters of Long-Term Care Facilities

Billings Area		Size
# 6	Billings	36
# 7	Billings	176
# 8	Billings	158
# 9	Billings	58
#24	Columbus	81
#42	Hardin	34
#43	Hardin	21
#56	Laurel	29
#73	Red Lodge	80
#74	Red Lodge	24
		697

Flathead Lake Area		Size
# 3	Big Fork	40
#52	Hot Springs	72
#54	Kalispell	66
#55	Kalispell	139
#69	Plains	12
#71	Polson	112
#75	Ronan	10
#76	Ronan	23
#83	Superior	20
#87	Whitefish	60
#88	Whitefish	50
		604

Helena Area		Size
#23	Clancy	67
#48	Helena	60
#49	Helena	63
#50	Helena	52
#51	Helena	108
#85	Townsend	18
		368

Central/East of Great Falls North of I-90 & 194R		Size
#45	Harlowtown	33
#75	Lewistown	70
#59	Lewistown	97
#77	Roundup	18
#89	White Sulphur Springs	31
		249

Missoula Area		Size
#41	Hamilton	98
#65	Missoula	62
#66	Missoula	107
#67	Missoula	51
#68	Missoula	44
		362

Bozeman Area		Size
# 5	Big Timber	48
#11	Bozeman	103
#12	Bozeman	56
#61	Livingston	115
		322

East of Billings on I-94		Size
#31	Forsyth	47
#63	Miles City	121
#64	Miles City	67
		235

Great Falls Area		Size
#37	Great Falls	230
#38	Great Falls	90
#39	Great Falls	42
#40	Great Falls	165
		527

Butte Area		Size
# 1	Anaconda	68
#15	Butte	200
#16	Butte	103
#17	Butte	100
#27	Deer Lodge	60
#28	Dillon	108
#80	Sheridan	39
		678

North of Great Falls		Size
#14	Browning	49
#18	Chester	40
#20	Choteau	41
#21	Choteau	24
#25	Conrad	63
#26	Cut Bank	39
#79	Shelby	32
		288

N.E. of Great Falls, Stop at Malta		Size
# 4	Big Sandy	29
#19	Chinook	34
#32	Ft. Benton	22
#44	Harlen	67
#46	Havre	18
#47	Havre	102
#62	Malta	35
		307

Rejected from Study Because of State Operation

#10	Boulder River School and Hospital	309 Patients
#33	Galen State Hospital	107 Patients
#86	Warm Springs	368 Patients
#58	Montana Center for Aged	199 Patients
		984

Rejected because of Extreme Travel Distances		Size	
# 2	Baker	32	Eastern
#13	Broadus	40	
#176	Glendive	75	
#81	Terry	12	
#34	Wibaux	40	
#30	Eureka	40	Extreme Northwest
#60	Libby	63	
#34	Glasgow	6	Extreme Northeast
#35	Glasgow	90	
#70	Plentywood	37	
#72	Poplar	21	
#78	Scobey	34	
#91	Wolf Point	60	
#22	Circle	40	Extreme Central East
#53	Jordon	12	
#81	Sidney	85	
		687	

Cluster Selection	Size	Cum. Size
Billings	697	697 *
Bozeman	322	1019 *
Butte	678	1697
Great Falls	527	2224 *
Helena	368	2592 *
Missoula	362	2954
Flathead	604	3558 *
East of Billings	235	3793
Central Montana	249	4042 *
Northeast Great Falls (Havre)	307	4349
North Great Falls	288	4637
Total	4,637	

Will draw six areas so interval is $\frac{4637}{6} = 773$

Draw a random start. For April 17th, use the first column and seventh row of Snedecor and Cochran and get 177.

Sample is determined by: 177, 177 + 173, 177 + 2(773), etc.
Sample is marked by *.

Individual Facility Selection

Billings	Cum.	Bozeman	Cum.	Great Falls	Cum.
# 6	36	# 5		#37	
# 7	212 *	#11		#38	
# 8	370 *	#12		#39	
# 9	428 *	#61		#40	
#24	409				
#42	543	Use all 4		Use all 4	
#43	564				
#56	593 *				
#73	673				
#74	697				

$\frac{697}{4}$ = 174 Start = 63

Flathead	Cum.	Central	Cum.	Helena	Cum.
# 3	40	#45	33	#23	67 *
#52	112 *	#57	103 *	#48	127
#54	178	#59	200 *	#49	190 *
#55	317 *	#77	218 *	#50	242 *
#69	329	#89	249 *	#51	350 *
#71	441 *			#85	368
#75	451	$\frac{249}{4}$ = 62 Start = 59			
#76	474			$\frac{368}{4}$ = 92 Start = 45	
#83	494				
#87	554 *				
#88	604				

$\frac{604}{4}$ = 151 Start = 82

Appendix XII. Item Analysis

Item Analysis

Item	Correlation
Item 1	.848
Item 2	.443
Item 3	.4783
Item 4	.7384
Item 5	.8671
Item 6	.4777
Item 7	.87803

Appendix XIII. Final Survey Instruments

FOR
COMPUTER
USE

CARD 1

C1-3_____ Questionnaire #_____

C4-5_____ Card # _____

C6-7_____ ID # _____

DEMOGRAPHIC INFORMATION

Please answer the questions below. This will give us more information about the people who work in nursing homes. We will keep this information confidential and will use it only for statistical analysis.

SEX_____ AGE_____

C8-9_____ What is your position at the nursing home?_____

What shift do you work?_____

Approximately how long have you worked here?_____

The purpose of this questionnaire is to measure your opinion of aspects of quality care in nursing homes. In filling out this questionnaire, make your judgements on the basis of what you feel. On each page you will find different areas to be judged and beneath it a set of descriptions. You are to rate each area according to these descriptions.

For example:

a) If you think the FOOD in the nursing home is very closely described by one end of the scale, you would place an "X" as follows:

FOOD

good __X__ ____ ____ ____ ____ ____ ____ ____ bad

or

good ____ ____ ____ ____ ____ ____ ____ __X__ bad

b) Or if you think the food in the nursing home is quite closely described by one end of the scale, you would place an "X" as follows:

FOOD

good ____ __X__ ____ ____ ____ ____ ____ ____ bad

or

good ____ ____ ____ ____ ____ ____ __X__ ____ bad

c) If you think the food in the nursing home is only slightly related to one side as opposed to the other side (but is not really neutral), then you should check as follows:

FOOD

good ____ ____ __X__ ____ ____ ____ ____ ____ bad

or

good ____ ____ ____ ____ __X__ ____ ____ ____ bad

d) If you consider the food in the nursing home to be average, you would place an "X" as follows:

FOOD

good ____ ____ ____ X ____ ____ ____ bad

IMPORTANT:

1) Place your check marks in the middle of spaces, not on the boundaries:

This				Not this		
		X			X	

2) Be sure you check every set of descriptions for every area--do not omit any.

3) Never put more than one check mark per set of descriptions.

Make each description a separate and independent judgment. Do not worry or puzzle over individual descriptions. It is your first impressions, the immediate "feelings" about the descriptions, that we want. On the other hand, please do not be careless, because we want your true impressions.

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C14-16 1. RECREATIONAL ACTIVITIES: This nursing home provides recreation for the residents. These activities are:

_____

a.	useful	____	____	____	____	____	____	____ useless
b.	stressful	____	____	____	____	____	____	____ unstressful
c.	interesting	____	____	____	____	____	____	____ uninteresting
d.	haphazard	____	____	____	____	____	____	____ organized
e.	no choice	____	____	____	____	____	____	____ choice

C17-19 2. THERAPEUTIC PROGRAMS: For the people who need special help like physical therapy, foot care, speech therapy, etc., there are programs which are:

_____

a.	thorough	____	____	____	____	____	____	____ minimal
b.	not available	____	____	____	____	____	____	____ available
c.	on-going	____	____	____	____	____	____	____ sporadic
d.	disorganized	____	____	____	____	____	____	____ organized
e.	important	____	____	____	____	____	____	____ unimportant

C20-22 3. FEELING OF SELF-WORTH: In this nursing home the individual's feeling of self-worth and human dignity is:

_____

a.	respected	____	____	____	____	____	____	____ not respected
b.	unimportant	____	____	____	____	____	____	____ important
c.	promoted	____	____	____	____	____	____	____ discouraged
d.	independency	____	____	____	____	____	____	____ dependency
e.	indifference	____	____	____	____	____	____	____ concern

C23-25 4. INDIVIDUAL CHOICE OF RESIDENT: The attitude of the nursing home toward the individual's choice and decision-making can be described as:

_____

a.	discouraged	____	____	____	____	____	____	____ encouraged
b.	allowed	____	____	____	____	____	____	____ not allowed
c.	unimportant	____	____	____	____	____	____	____ important
d.	choice	____	____	____	____	____	____	____ no choice
e.	acceptable	____	____	____	____	____	____	____ not acceptable

C26-28 5. FACILITY ATTITUDE TOWARD FAMILY PARTICIPATION: This nursing home's attitude toward including relatives in the care of the resident.

_____

a.	uninvolved	____	____	____	____	____	____	____ involved
b.	open	____	____	____	____	____	____	____ indifferent
c.	ignored	____	____	____	____	____	____	____ encouraged
d.	included	____	____	____	____	____	____	____ excluded
e.	opposition	____	____	____	____	____	____	____ cooperation

C29-31 6. RESIDENT PRIVACY: In this nursing home a resident's privacy is viewed as:

_____

a.	unimportant	____	____	____	____	____	____	____ important
b.	possible	____	____	____	____	____	____	____ impossible
c.	no privacy	____	____	____	____	____	____	____ privacy
d.	practical	____	____	____	____	____	____	____ impractical
e.	inadequate	____	____	____	____	____	____	____ adequate

C32-34 7. ADMINISTRATION'S ATTITUDE: The general attitude of the people who run the home is:

_____

a.	open	____	____	____	____	____	____	____ closed
b.	inflexible	____	____	____	____	____	____	____ flexible
c.	knowledgeable	____	____	____	____	____	____	____ unknowledgeable
d.	negative	____	____	____	____	____	____	____ positive
e.	encouraging	____	____	____	____	____	____	____ discouraging

C35-37 8. RESIDENT'S RECREATIONAL NEEDS: When a resident wants recreation, the activities are:

_____

a.	individualized	____	____	____	____	____	____	____ same
b.	met	____	____	____	____	____	____	____ unmet
c.	boring	____	____	____	____	____	____	____ fun
d.	involved	____	____	____	____	____	____	____ uninvolved
e.	no choice	____	____	____	____	____	____	____ choice

C38-40 9. LIGHTING: The natural and artificial lighting in this nursing home is:

_____

a.	inconvenient	____	____	____	____	____	____	____ convenient
b.	sufficient	____	____	____	____	____	____	____ insufficient
c.	inadequate	____	____	____	____	____	____	____ adequate
d.	soft	____	____	____	____	____	____	____ harsh
e.	improper	____	____	____	____	____	____	____ proper

C41-43 10. FAMILY/RESIDENT INPUT TO HEALTH CARE: This nursing home gives a person the feeling that family and/or resident participation in health care planning is:

_____

a.	not valued	____	____	____	____	____	____	____ valued
b.	encouraged	____	____	____	____	____	____	____ discouraged
c.	meaningless	____	____	____	____	____	____	____ meaningful
d.	important	____	____	____	____	____	____	____ unimportant
e.	excluded	____	____	____	____	____	____	____ included

C44-46 11. RESIDENT RESTRAINTS: When drugs or physical restraints are used on a resident, the use of these restraints is:

_____

a.	maximized	____	____	____	____	____	____	____ minimized
b.	necessary	____	____	____	____	____	____	____ unnecessary
c.	clear	____	____	____	____	____	____	____ obscure
d.	unsupervised	____	____	____	____	____	____	____ supervised
e.	low drug use	____	____	____	____	____	____	____ high drug use

C47-49 12. COMPETENCE OF STAFF: The people who work here are:

_____

a.	responsible	___	___	___	___	___	___	___ irresponsible
b.	good	___	___	___	___	___	___	___ poor
c.	not dependable	___	___	___	___	___	___	___ dependable
d.	qualified	___	___	___	___	___	___	___ under qualified
e.	untested	___	___	___	___	___	___	___ tested

C50-52 13. NOISE: The noises in this nursing home are:

_____

a.	offensive	___	___	___	___	___	___	___ not offensive
b.	soothing	___	___	___	___	___	___	___ distracting
c.	meaningless	___	___	___	___	___	___	___ meaningful
d.	controlled	___	___	___	___	___	___	___ uncontrolled
e.	not predictable	___	___	___	___	___	___	___ predictable

C53-55 14. STAFF INPUT TO HEALTH CARE: The opportunity for all staff to participate in health care is:

_____

a.	encouraged	___	___	___	___	___	___	___ discouraged
b.	not valued	___	___	___	___	___	___	___ valued
c.	possible	___	___	___	___	___	___	___ not possible
d.	ignored	___	___	___	___	___	___	___ considered
e.	consistent	___	___	___	___	___	___	___ sporadic

C56-58 15. ENVIRONMENTAL STRESS: For the residents of this nursing home, pressures and tensions are:

_____

a.	uncontrolled	___	___	___	___	___	___	___ controlled
b.	comfortable	___	___	___	___	___	___	___ uncomfortable
c.	unrelieved	___	___	___	___	___	___	___ relieved
d.	low level	___	___	___	___	___	___	___ high level
e.	harmony	___	___	___	___	___	___	___ discord

C59-61 16. STAFF ATTITUDE: The behavior of the people who work here toward the residents:

_____

a.	indifferent	___	___	___	___	___	___	___ committed
b.	flexible	___	___	___	___	___	___	___ inflexible
c.	negative	___	___	___	___	___	___	___ positive
d.	respectful	___	___	___	___	___	___	___ disrespectful
e.	uncaring	___	___	___	___	___	___	___ caring

C62-64 17. SAFETY: In this nursing home, safety for the residents is:

_____

a.	inadequate	___	___	___	___	___	___	___ adequate
b.	clear	___	___	___	___	___	___	___ obscure
c.	ignored	___	___	___	___	___	___	___ recognized
d.	controlled	___	___	___	___	___	___	___ uncontrolled
e.	no procedures	___	___	___	___	___	___	___ procedures

C65-67 18. PERSONAL IDENTITY OF RESIDENT: The choice of the resident to be who he wants to be is:

_____	a.	retained	____	____	____	____	____	____	____	lost
	b.	not recognized	____	____	____	____	____	____	____	recognized
	c.	expressed	____	____	____	____	____	____	____	not expressed
	d.	discouraged	____	____	____	____	____	____	____	encouraged
	e.	accepted	____	____	____	____	____	____	____	not accepted

C68-70 19. PREVENTATIVE HEALTH CARE: In this nursing home, keeping residents well is:

_____	a.	not valued	____	____	____	____	____	____	____	valued
	b.	demonstrated	____	____	____	____	____	____	____	not demonstrated
	c.	sporadic	____	____	____	____	____	____	____	consistent
	d.	important	____	____	____	____	____	____	____	unimportant
	e.	not in care plan	____	____	____	____	____	____	____	in care plan

C71-73 20. PERSONALIZED SPACE: Space provided in the nursing home that is all your own (resident's).

_____	a.	inadequate space	____	____	____	____	____	____	____	ample space
	b.	important	____	____	____	____	____	____	____	unimportant
	c.	allowed	____	____	____	____	____	____	____	not allowed
	d.	sterile setting	____	____	____	____	____	____	____	warm setting
	e.	available	____	____	____	____	____	____	____	not available

CARD 2

C1-7 21. FOOD APPEAL: The nursing home provides residents with food which is:

_____

C8-10	a.	tasteful	____	____	____	____	____	____	____	tasteless
	b.	unattractive	____	____	____	____	____	____	____	attractive
	c.	varied	____	____	____	____	____	____	____	repetitive
_____	d.	not planned	____	____	____	____	____	____	____	planned
	e.	colorful	____	____	____	____	____	____	____	drab

C11-13 22. COMMUNITY PARTICIPATION: This nursing home considers community participation:

_____	a.	important	____	____	____	____	____	____	____	unimportant
	b.	insignificant	____	____	____	____	____	____	____	significant
	c.	encouraged	____	____	____	____	____	____	____	not encouraged
	d.	overlooked	____	____	____	____	____	____	____	recognized
	e.	regarded	____	____	____	____	____	____	____	disregarded

C14-16 23. KITCHEN: The kitchen in this nursing home is:

	a.	functional	____	____	____	____	____	____	____	nonfunctional
_____	b.	inadequate	____	____	____	____	____	____	____	adequate
	c.	clean	____	____	____	____	____	____	____	dirty
	d.	disorganized	____	____	____	____	____	____	____	organized
	e.	convenient	____	____	____	____	____	____	____	inconvenient

C17-19 24. FACILITY ATTITUDE TOWARD SEXUALITY OF RESIDENT: This nursing home's attitude toward the sexual need of the resident:

_____

a.	aware	____	____	____	____	____	____	____ unaware
b.	disapproving	____	____	____	____	____	____	____ approving
c.	desirable	____	____	____	____	____	____	____ distasteful
d.	closed	____	____	____	____	____	____	____ open
e.	privacy for sexual activity	____	____	____	____	____	____	____ no privacy for sexual activity

C20-22 25. ASSISTIVE DEVICES: Assistive devices such as wheelchairs, dentures, etc., provided by this nursing home are:

_____

a.	inappropriate	____	____	____	____	____	____	____ appropriate
b.	important	____	____	____	____	____	____	____ not important
c.	not enough	____	____	____	____	____	____	____ enough
d.	adequate	____	____	____	____	____	____	____ inadequate
e.	not available	____	____	____	____	____	____	____ available

C23-25 26. ADMINISTRATION'S ATTITUDE TOWARD STAFF MOTIVATION: The behavior of the people who run the home toward the staff shows:

_____

a.	indifference	____	____	____	____	____	____	____ concern
b.	consistency	____	____	____	____	____	____	____ inconsistency
c.	unimportance	____	____	____	____	____	____	____ importance
d.	appropriate	____	____	____	____	____	____	____ inappropriate
e.	no incentive	____	____	____	____	____	____	____ incentive

C26-28 27. FOOD PREPARATION/SERVICE: In this nursing home, the way the food is prepared and served is:

_____

a.	efficient	____	____	____	____	____	____	____ inefficient
b.	dirty	____	____	____	____	____	____	____ clean
c.	punctual	____	____	____	____	____	____	____ late
d.	inflexible	____	____	____	____	____	____	____ flexible
e.	consistent	____	____	____	____	____	____	____ inconsistent

C29-31 28. RESIDENT TREATMENT PLAN: In this nursing home a health care plan for each resident is:

_____

a.	unavailable	____	____	____	____	____	____	____ available
b.	complete	____	____	____	____	____	____	____ incomplete
c.	unrealistic	____	____	____	____	____	____	____ realistic
d.	coordinated	____	____	____	____	____	____	____ not coordinated
e.	ignored	____	____	____	____	____	____	____ followed

This questionnaire is made up of seven statements about nursing homes. Below each statement is a scale. Read each statement and, according to what you know about resident care in the nursing home, mark where the nursing home falls on that scale. Each scale runs from 0 (no opinion) to 5 (high opinion).

For example, the statement might read:

The food at the nursing home tastes good.

If you think the food is "average" you would put an X above the 3, as it is marked below.

			X		
0	1	2	3	4	5
(no opinion)	(poor)	(fair)	(average)	(good)	(excellent)

However, if you think the food is better than "average" you would mark either a 4 or a 5, depending on how much better you think the food is. Adjectives have been put under the numbers to help you score the statements, but try to think of rating the statements from 0 to 5. You can only mark one number per statement.

C10 1. This nursing home is a safe, well-lighted building that is easy for the residents to get around in.

___

0	1	2	3	4	5
(no opinion)	(poor)	(fair)	(average)	(good)	(excellent)

C11 2. This nursing home does a good job of taking care of residents when they have health problems.

___

0	1	2	3	4	5
(no opinion)	(poor)	(fair)	(average)	(good)	(excellent)

C12 3. This nursing home gives the resident a feeling of being his own person.

___

0	1	2	3	4	5
(no opinion)	(poor)	(fair)	(average)	(good)	(excellent)

C13 4. The staff of the nursing home is helpful and concerned about the residents.

___

0	1	2	3	4	5
(no opinion)	(poor)	(fair)	(average)	(good)	(excellent)